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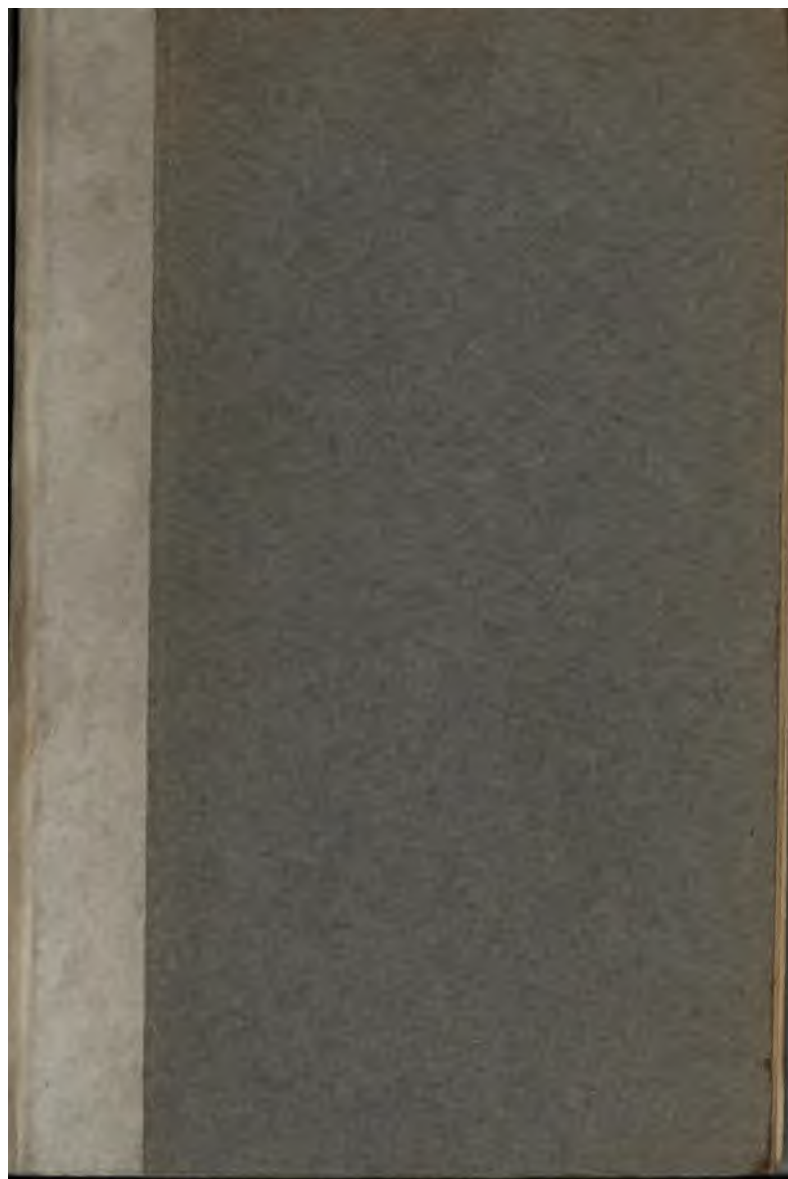
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OBSERVATIONS ON TRANCE:

OR,

HUMAN HYBERNATION.

BY

JAMES BRAID,

M.R.C.S. EDINBURGH, C.M.W.S., ETC., ETC.

"No affection, to which the animal frame is subject, is more remarkable than this. (Catalepsy or Trance.) There is such an apparent extinction of every faculty essential to life, that it is inconceivable how existence should go on during the continuance of the fit."—*Macnish*.

"EX ORIENTE LUX."

LONDON:

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PREFACE.

SOME years ago I had a number of queries published in the *Medical Journals*, and also printed in a separate form for circulation, both at home and abroad, with the view of accumulating additional and accurate information regarding the curious points in Physiology treated of in this pamphlet. Through the kindness of my friend, GEORGE SWINTON, Esq. of Edinburgh, and Sir C. E. TREVELYAN, of the Treasury, application was made to Sir CLAUDE MARTIN WADE on my behalf, and a copy of the said queries was given to him; to which application Sir CLAUDE kindly responded, by furnishing me with the valuable narrative now published, regarding what he was an eye-witness of when acting as Political Agent at the Court of Runjeet Singh, at Lahore. The narrative bears internal evidence that Sir CLAUDE was a most accurate observer, as well as a lucid writer. To all

of those gentlemen I beg to tender my very best thanks for furnishing me with such a valuable document. It was intended to have appeared in a new edition of my work on *Hypnotism*; but as the publication of that work must unavoidably be postponed for a short time longer, I have thought it desirable to print the original information which I have obtained immediately, in a separate form, as it cannot fail to be most interesting to all scientific men; and its publication may, moreover, stimulate others to investigate and furnish additional evidence on the subject.

The second case, by an eye-witness of the facts, was furnished to me by a retired Major, who served as an officer for many years in India. He requested me not to publish his name, because he understood the Directors disliked that any official men in their service should be known to take a prominent part in anything so far out of the line of their special duties. However, after I had written my narrative of the transaction, from the facts which he had communicated to me, he was kind enough to hear it read over to him, in the presence of several mutual friends, when he pronounced it correct on *every* point. He assured us that he never could forget the

circumstances of that transaction, in as much as the part which he took in it, and his dread, in the end, that the devotee must have perished in the enterprise, and he be thereby rendered liable to be indicted as accessory to his murder, had caused him greater anxiety and horror than all the actions and scenes of danger he had encountered during the whole of his military career.

If medical gentlemen residing in India would only take the trouble of investigating a few of these cases systematically and carefully, not merely with the view of guarding against all sources of collusion and fraud which might be perpetrated in such exhibitions, but also by weighing the body of the Fakeer before his being shut up or buried, and again on being exposed to view; and also by noting particularly the relative degree in which respiration and circulation become respectively affected, both as regards time and extent of change, by the voluntary processes of the Fakeer for inducing the Trance, we might very soon be in possession of all the information on the subject which we could desire. I should feel much obliged to any gentleman who would be so kind as forward such information to me, and, in publishing, 1

should duly acknowledge the extent of my obligation to each individual who might entrust such information to my care.

It may here be requisite for me to explain, that by the term *Hypnotism*, or *Nervous Sleep*, which frequently occurs in the following pages, I mean a peculiar condition of the nervous system, into which it may be thrown by artificial contrivance, and which differs, in several respects, from common sleep or the waking condition. I do not allege that this condition is induced through the transmission of a magnetic or occult influence from my body into that of my patients; nor do I profess, by my processes, to produce the higher phenomena of the Mesmerists. My pretensions are of a much more humble character, and are all consistent with generally admitted principles in physiological and psychological science. Hypnotism might therefore not inaptly be designated, *Rational Mesmerism*, in contra-distinction to the *Transcendental Mesmerism* of the Mesmerists.

ARLINGTON-HOUSE,

Oxford-street, Manchester,

July 1850.

OBSERVATIONS ON TRANCE.

IN the year 1845 I published some observations on the remarkable feats of the Fakeers of India, who had been represented as having acquired the power of suffering themselves to be buried alive, enclosed in bags, shut up in sealed boxes, or even of being buried for days or for weeks in common graves, and assuming their wonted activity on being released from their temporary confinement or sepulture.

Such extraordinary feats were naturally looked upon with suspicion, and believed to be a species of deception, accomplished entirely through collusion, and not at all *bona fide* transactions, such as alleged. Whilst I think it highly probable that this is the true character of *many* of these alleged feats, still there are others which admit of no such explanation. The difficulties of eluding detection in several carefully narrated cases, were evidently so great as to have rendered deception impossible; and it therefore becomes the duty of scientific men fairly to meet the difficulty, and to endeavour to arrive at a satisfactory solution of the phenomena on physiological principles.

On careful consideration of the whole phenomena narrated in connection with these cases, coupled with my experience of the powers of hypnotism, by which individuals can throw themselves into a state of catalepsy or trance, more or less profound, in which condition, like the hybernating animals, all the vital functions are reduced to the minimum of what is compatible with continued existence and restoration to their former activity, I arrived at the conclusion, that the individuals referred to accomplished these apparently impossible feats by throwing themselves

into this state of temporary hybernation or trance, through suppressing the respiration and fixing the mind, just as was manifested by the well-attested case of Colonel Townsend in this country, and by many patients whom I have myself witnessed, who have acquired the like power in a minor degree.

The following is the narrative of Colonel Townsend's case, as recorded by the late Dr. Cheyne of Dublin; and, when we take into consideration the deservedly high estimation in which Dr. Cheyne was held, as a practical physician, possessed of high talents and scientific attainments, and the high character he bore as a Christian man and a gentleman, it is impossible to have had the Colonel's interesting and uncommon case attested and recorded more satisfactorily.

Dr. Cheyne narrates the case as follows :—"He could die or expire when he pleased, and yet, by an effort, or somehow, he could come to life again. He insisted so much upon us seeing the trial made, that we were at last forced to comply. We all three felt his pulse first; it was distinct, though small and thready, and his heart had its usual beating. He composed himself on his back, and lay in a still posture for some time; while I held his right hand, Dr. Baynard laid his hand on his heart, and Mr. Skrine held a clean looking-glass to his mouth. I found his pulse sink gradually, till at last I could not feel any, by the most exact and nice touch. Dr. Baynard could not feel the least motion in the heart, nor Mr. Skrine perceive the least soil of breath on the bright mirror he held to his mouth. Then each of us, by turns, examined his arm, heart, and breath, but could not, by the nicest scrutiny, discover the least symptom of life in him. We reasoned a long time about this odd appearance as well as we could, and, finding he still continued in that condition, we began to conclude that he had, indeed, carried the *experiment too far*; and at last we were satisfied *that he was actually dead*, and were just ready to

leave him. This continued about half an hour. By nine in the morning, in autumn, as we were going away, we observed some motion about the body, and, upon examination, found his pulse and the motion of his heart gradually returning; he began to breathe heavily and speak softly. We were all astonished to the last degree at this unexpected change, and, after some further conversation with him, and among ourselves, went away fully satisfied as to all the particulars of this fact, but confounded and puzzled, and not able to form any rational scheme that might account for it."

In the "Dabistan," a learned work on the religious sects in India, translated a few years ago from the Persic, reference is made to the power acquired by various individuals of separating their souls from their bodies, as they style it, and resuming their wonted relations to each other again at will. One individual is specially referred to by name, who had attained the power of suppressing his breath for *three hours*; another who could do so for *twelve hours*; another who could do so for *two days*: and Balik Natha, who attained to above a hundred years of age, could suppress his breath for *A WEEK*. Here, then, we have exactly similar phenomena exhibited by these Hindoos, as those recorded in the above case of Colonel Townsend; and the knowledge of these facts will prepare the reader, in some measure, for the reception of the still more astounding phenomena recorded in the following narratives.

Since the above-named period, I have lost no opportunity of accumulating additional evidence on the subject; and the result is, that I am now enabled to publish two valuable documents from eye-witnesses of the facts, which, together with the evidence we formerly possessed, must set the point at rest for ever as to the fact of the feats referred to having been *genuine phenomena*.

Sir Claude M. Wade's narrative was accompanied by the following polite note:

"Edinburgh, Sept. 13, 1845.

"Sir Claude Wade presents compliments to Dr. Braid, and has much pleasure in enclosing, for his *free* use and information, in the form of a narrative, replies to the queries received from Dr. Braid, through Mr. George Swinton, regarding the Fakeer who buried himself alive at Lahore in 1837. Sir Claude regrets, that in consequence of his being constantly on the move, and unable to refer to his papers for information, he has only now found leisure to comply with Dr. Braid's application. Should any point be omitted in Sir C. Wade's account, he will be happy to supply the deficiency on a further application, addressed to his usual place of residence, Ryde, Isle of Wight.

"To Dr. Braid, &c., &c., Manchester."

"REPLIES TO DR. BRAID'S QUERIES REGARDING THE FAKEER WHO BURIED HIMSELF ALIVE AT LAHORE IN 1837.

"I was present at the Court of Runjeet Singh when the Fakeer mentioned by the Honourable Captain Osborne was buried alive for six weeks; and, although I arrived a few hours after his actual interment, and did not, consequently, witness that part of the phenomenon, I had the testimony of Runjeet Singh himself, and others the most credible witnesses of his Court, to the truth of the Fakeer having been so buried before them; and, from my having myself been present when he was disinterred, and restored to a state of perfect vitality, in a position so close to him as to render any deception impossible, it is my firm belief that there was no collusion in producing the extraordinary fact which I have related. Captain Osborne's book is not at present before me, that I might refer to such parts of his account as devolve the authenticity of the fact on my authority. I will, therefore, briefly state what I saw, to enable others to judge of *the weight* due to my evidence, and whether any *proofs of collusion* can, in their opinion, be detected.

"On the approach of the appointed time, according to invitation, I accompanied Runjeet Singh to the spot where the Fakeer had been buried. It was in a square building, called a *barra durra*, in the middle of one of the gardens, adjoining the palace at Lahore, with an open verandah all round, having an enclosed room in the centre. On arriving there, Runjeet Singh, who was attended on the occasion by the whole of his Court, dismounting from his elephant, asked me to join him in examining the building to satisfy himself that it was closed as he had left it. We did so; there had been a door on each of the four sides of the room, three of which were perfectly closed with brick and mortar, the fourth had a strong door, which was also closed with mud up to the padlock, which was sealed with the private seal of Runjeet Singh in his own presence, when the Fakeer was interred. Indeed, the exterior of the building presented no aperture by which air could be admitted, or any communication held by which food could be conveyed to the Fakeer. I may also add, that the walls closing the doorway bore no mark whatever of having been recently disturbed or removed.

"Runjeet Singh recognised the seal as the one which he had affixed, and as he was as sceptical as any European could be of the success of such an enterprise,—to guard as far as possible against any collusion,—he had placed two companies from his own personal escort near the building, from which four sentries were furnished and relieved every two hours, night and day, to guard the building from intrusion. At the same time, he ordered one of the principal officers of his Court to visit the place occasionally, and to report the result of his inspection to him, while he himself, or his Minister, kept the seal which closed the hole of the padlock, and the latter received the report, morning and evening, from the officer on guard.

"After our examination we seated ourselves in

the verandah opposite the door, while some of Runjeet Singh's people dug away the mud wall, and one of his officers broke the seal and opened the padlock. When the door was thrown open, nothing but a dark room was to be seen. Runjeet Singh and myself then entered it, in company with the servant of the Fakeer; and a light being brought, we descended about three feet below the floor of the room, into a sort of cell, where a wooden box, about four feet long by three broad, with a sloping roof, containing the Fakeer, was placed upright, the door of which had also a padlock and seal similar to that on the outside. On opening it we saw a figure enclosed in a bag of white linen, fastened by a string over the head—on the exposure of which a grand salute was fired, and the surrounding multitude came crowding to the door to see the spectacle. After they had gratified their curiosity, the Fakeer's servant, putting his arms into the box, took the figure out, and closing the door, placed it with its back against it, exactly as the Fakeer had been squatted (like a Hindoo idol) in the box itself.

"Runjeet Singh and myself then descended into the cell, which was so small, that we were only able to sit on the ground in front of the body, and so close to it as to touch it with our hands and knees.

"The servant then began pouring warm water over the figure; but, as my object was to see if any fraudulent practices could be detected, I proposed to Runjeet Singh to tear open the bag, and have a perfect view of the body before any means of resuscitation were employed. I accordingly did so; and may here remark, that the bag, when first seen by us, looked mildewed, as if it had been buried some time. The legs and arms of the body were shrivelled and stiff, the face full, the head reclining on the shoulder like that of a corpse. I then called *to the medical gentleman who was attending me to come down and inspect the body, which he did, but*

could discover no pulsation in the heart, the temples, or the arm. There was, however, a heat about the region of the brain, which no other part of the body exhibited. (a)

"The servant then recommenced bathing him with hot water, and gradually relaxing his arms and legs from the rigid state in which they were contracted, Runjeet Singh taking his right and his left leg, to aid by friction in restoring them to their proper action; during which time the servant placed a hot wheaten cake, about an inch thick, on the top of the head,—a process which he twice or thrice renewed. He then pulled out of his nostrils and ears the wax and cotton with which they were stopped; and after great exertion opened his mouth by inserting the point of a knife between his teeth, and, while holding his jaws open with his left hand, drew the tongue forward with his right,—in the course of which the tongue flew back several times to its curved position upwards, in which it had originally been, so as to close the gullet.

"He then rubbed his eyelids with ghee (or clarified butter) for some seconds, until he succeeded in opening them, when the eyes appeared quite motionless and glazed. After the cake had been applied for the third time to the top of his head, the body was violently convulsed, the nostrils became inflated, when respiration ensued, and the limbs began to assume a natural fulness; but the pulsation was still faintly perceptible. The servant then put some of the ghee on his tongue, and made him swallow it. A few minutes afterwards, the eyeballs became dilated, and recovered their natural colour, when the Fakcer, recognising Runjeet Singh sitting close to him, articulated, in a low, sepulchral tone, scarcely audible,

(a) Might not this "heat about the region of the brain" have been caused by the warm water poured over the head imparting the greatest degree of heat to the part with which it came first in contact?—*Braid.*

‘Do you believe me now?’ Runjeet Singh replied in the affirmative, and invested the Fakeer with a pearl necklace and superb pair of gold bracelets, and pieces of silk and muslin, and shawls, forming what is called a *khelat*; such as is usually conferred by the Princes of India on persons of distinction.

“From the time of the box being opened, to the recovery of the voice, not more than half an hour could have elapsed; and in another half-hour the Fakeer talked with myself and those about him freely, though feebly, like a sick person; and we then left him, convinced that there had been no fraud or collusion in the exhibition we had witnessed.(a)

“I was present, also, when the Fakeer was summoned by Runjeet Singh from a considerable distance to Lahore, some months afterwards, again to bury himself alive before Captain Osborne and the officers of the late Sir William M’Naghton’s mission in 1838; which, after the usual preparation, he offered to do for a few days, the term of Sir William’s mission being nearly expired; but from the tenor of the doubts expressed, and some observations made by Captain Osborne as to keeping the key of the room in which he was to be buried in his own possession, the Fakeer, with the superstitious dread of an Indian, became evidently alarmed, and apprehensive that if once within Captain Osborne’s power, he would not be allowed to escape. His refusal on that occasion, will naturally induce a suspicion of the truth of the transaction which I witnessed; but to those well acquainted with the character of the natives of India, it will not be surprising that, where life and death were concerned, the Fakeer should have manifested a distrust of what

(a) These feats of the Fakeers in no way invalidate the importance of the Gospel miracle of the resurrection of Christ. In the latter case, the transfixing of the heart by the soldier’s spear was necessarily a mortal wound, from which recovery was impossible unless by a miracle.

to him appeared the mysterious intentions of a European who was a perfect stranger to him, while he was ready to repose implicit confidence in Runjeet Singh and others before whom he had exhibited. I am satisfied that he refused only from the cause I have mentioned, and that he would have done for me what he declined doing for Captain Osborne.

"It had previously been observed, also, by Sir William M'Naghton and others of the party, truly, though jestingly, that if the Fakeer should not survive the trial to which he was required to submit, those who might instigate him to it would run the risk of being indicted for murder, which induced them to refrain from pressing the subject further.

"I share entirely in the apparent incredibility of the fact of a man being buried alive, and surviving the trial for various periods of duration; but however incompatible with our knowledge of physiology, in the absence of any visible proof to the contrary, I am bound to declare my belief in the facts which I have represented, however impossible their existence may appear to others. (a)

(a) There may be some hypercritical, suspicious individuals ready to allege, as no direct declaration to the contrary has been recorded in the narrative, that some subterranean communication may have existed, so as to have afforded access to the Fakeer by accomplices during his imprisonment in the *barra durra*, and that without the possibility of their being detected by the guards surrounding the exterior of the building. When we reflect, however, on the fact, that the object of Runjeet Singh was not to prove, but to *disprove*, the possibility of the success of such an enterprise, it is impossible for us to imagine, with all the precautions narrated as having been adopted by him for guarding against deception exteriorly, that he should not have exercised equal scrutiny and care to guard against *subterranean* intrusion; without which security, all the external precautions would have been a gross absurdity. In fact, such an oversight on a point regarding which the most simple individual would not readily suffer himself to be deceived, would have exposed Runjeet Singh, and the whole of his Court, to the suspicion

"I took some pains to inquire into the mode by which such a result was effected, and was informed that it rested on the doctrine of the Hindoo physiologists, that *heat* constituted the self-existent principle of life, and that if the functions of the other elements were so far destroyed as to leave that one in its perfect purity, life could be sustained for considerable lengths of time independent of air, food, or any other means of sustenance. To produce such a state the patients are obliged to go through a very severe preparation; for a description of which, *vide* the enclosed note.—(Unfortunately this note did not come to hand with the narrative.—J. B.)

"How far such means are calculated to produce such effects the physiologists will be better able to

of being accomplices of the Fakeer in the perpetration of a gross public imposture,—a most improbable position for such a prince to place himself and his Court in, for such a purpose.

And again; that Runjeet Singh was sceptical up to the moment of the Fakeer's restoration, is obvious from the terms in which the Fakeer addressed him when he recovered his sight,—“Do you believe me now?” The mildewed state of the bag, as remarked by Sir Claude M. Wade, at the time when the box was opened and the figure first exposed, was most conclusive as to its having been buried for some time.

Lieut. A. Boileau's case meets all the objections—for the cell, or grave, was lined with masonry, and large slabs of stone covered it, so as to render it impossible for the Fakeer to escape.—*Vide* page 19. Indeed at a subsequent interment of this Fakeer, besides all the precautions enumerated above as resorted to on that occasion, after the box containing the Fakeer was deposited in the cell, locked and sealed, earth was turned in and trodden down, so as completely to surround and cover the box; a crop of barley was sown over it; and a constant guard maintained on the spot. Moreover, twice during the period of interment Runjeet Singh had the body dug up, when it was found to be in exactly the same position as when interred, and in a state of apparently entirely suspended animation. At the expiration of this prolonged interment, the Fakeer recovered under the usual treatment.

judge than I can pretend to do. I merely state what I saw and heard; and think, that when we consider the incredulity and ridicule, and actual persecution, with which some of the most wonderful discoveries of modern times have been regarded—viz., galvanism, Harvey's system of the circulation of the blood, Mesmerism, &c. &c.; that it is presumptuous in any of us to deny to the Hindoos the possible discovery or attainment of an art which has hitherto escaped the researches of European science.'

Such, then, is the narrative of Sir C. M. Wade; and when we consider the high character of the author as a gentleman of honour, talents, and attainments of the highest order, and the searching, painstaking efforts displayed by him throughout the whole investigation, and his close proximity to the body of the Fakeer, and opportunity of observing minutely every point for himself, as well as the facilities, by his personal intercourse with Runjeet Singh and the whole of his Court, of gaining the most accurate information on every point, I conceive it is impossible to have had a more valuable or conclusive document for determining the fact, that no collusion or deception existed in the above case.

The next case I shall adduce is one furnished to me by Sir C. E. Trevelyan, of the Treasury. He was not an eye-witness of the transaction, but the source of his information seems to be highly satisfactory. He says:—"I perfectly well recollect, that when I was acting as political agent at Kotah, in 1829—30, the Rajah Rana's Vukeel, (who was a very respectable, and, for a native Indian, a very truthful man,) told me one day, when he happened to be with me on business, that he had been present that morning with the Rajah Rana at the digging up of a Fakeer, who had been buried, as well as I recollect, ten days; and that after his resurrection he was in good health, and when he had refreshed himself with eating and drinking, was quite himself again. The Vukeel also assured me, that there could be no de-

ception, because the man had been buried in the Rajah Rana's presence, and a guard of trusty soldiers had been constantly stationed over the place until he was dug up.

"I also recollect that the commandant of my escort and the surgeon to the political agency were fully impressed with the belief that the facts of the case were as stated by the Vukeel. They obtained their information from the independent source of some of the Sepoys of the escort, who were present at the digging up; and I received several additional particulars from this source, which I cannot now call to mind, except that the Sepoys stated it as a fact, that some Fakeers and others had a way of drawing in their breath, and thrusting their tongues back and clenching their fingers, which enabled them to subsist for a long time without food, and with very little air.

"I believe the man who was buried at Kotah to be the same person who is spoken of in 'Boileau's Journal,' and that he went from one native court to another to get money by a display of his powers.

"My own belief is, that he really did remain without food, and with only so much air as could reach him in his box underground, for a period of ten days or thereabouts."

I feel deeply indebted to Sir C. Trevelyan for the above valuable testimony relative to this curious inquiry.

The following case occurred under the eye of Lieut. A. Boileau, a British officer, and is recorded in his "Narrative of a Journey in Rajwarra, in 1835," and is that referred to above by Sir C. E. Trevelyan:

"Just before our arrival at Jesulmer the Rawul had adopted a most singular expedient to obtain an heir to his throne, and the circumstances of the case are altogether so extraordinary that we should hardly have given them credence had they not occurred so immediately under our notice. We

were told, soon after our coming, that a man had been buried alive, of his own free will, at the back of the tank close to our tents, and that he was to remain under ground for a whole month before the process of exhumation should take place. The prescribed period elapsed on the 1st of April, 1835, and in the forenoon of that day he was dug out alive, in the presence of Goshur Lal, one of the ministers who had also superintended his interment. The place in which he was buried is a small building of stone, about twelve feet long, and eight feet broad, built on the west edge of the large tank called Gurrassie, so often mentioned. In the floor of the house was a hole, about three feet long, two and a half broad, and the same depth, or perhaps a yard deep, in which he was placed, in a sitting posture, sewed up in a linen shroud, with his knees doubled up towards the chin, his feet turned inward towards the stomach, and his hands also pointed inward towards the chest. The cell, or grave, *was lined with masonry*, and floored with many folds of woollen and other cloth, that the white ant, and such insects, should be the less able to molest him. *Two heavy slabs of stone, five or six feet long, several inches thick, and broad enough to cover the mouth of the grave, were then placed over him, so that he could not escape*, and, I believe, a little earth was plastered over the whole, so as to make the surface of the ground smooth and compact. *The door of the house was also built up, and people placed outside to mount guard during the whole month, so that no tricks might be p'ayed, nor deception practised.* * * * Lieut. Trevelyan and I set off together to see what might remain to be seen. The outer wall of the house door had been broken up, the covering of the grave removed, and the body lifted out in the presence of Goshur Lal. The moonshee arrived in time to see the opening of the shroud, as above mentioned, and stated that he was taken out in a perfectly senseless state, with his eyes closed, his hands cramped and powerless, his

stomach very much shrunken, and his teeth joined so fast together, that the by-standers were obliged to force open his mouth with an iron instrument, in order to pour a little water down his throat. Under this treatment he gradually recovered his senses, and was restored to the use of his limbs. * * * * *He conversed with us in a low, gentle tone of voice, as if his animal functions were still in a very feeble state; but so far from appearing distressed in mind by the long interment from which he had just been released, he said THAT WE MIGHT BURY HIM AGAIN FOR A TWELVEMONTH IF WE PLEASED !*

“ He is rather a young man, about thirty years of age, and his native village is within five kos of Karnaul; but, instead of remaining at home, he generally travels about the country to Ajmer, Kotah, Indor, &c., allowing himself to be buried for weeks or months by any one who will pay him handsomely for the same. * * * * This individual is said to have acquired by long practice the art of holding his breath for a considerable period, as during the time that one might count fifty, and gradually increasing at intervals to one hundred, two hundred, and so on, as the pearl-divers may be supposed to do. He is, moreover, said to have acquired the power of shutting his mouth, and at the same time stopping the interior opening of the nostrils with his tongue, which latter feat is at times practised as a means of suicide by the negro slaves in the West Indies, when suffering under the lash. * * * * As a farther preparation for this long burial, the subject of the present experiment abstains from all solid food some days previous to interment, taking no other nourishment than milk, which is believed by the natives to pass off almost entirely by the urethra, so that he may not be inconvenienced by the contents of the stomach or bowels while pent up in his narrow grave.”

The next case I have to narrate, is, if possible

still more conclusive, inasmuch as the devotee was buried in a common grave, within the military limits, exactly in the same manner as they buried the common soldiers—with this exception, that he had no coffin—in an open space, where the whole transaction was witnessed by thousands of Hindoos, who were anxiously watching to guard their sainted brother against foul play which might be inflicted on him by the Mussulman guards, who were appointed to do duty at his grave, so as to prevent the possibility of intrusion or collusion during the whole period of his interment. There were thus a fair field and no favour for the devotee ; abundance of witnesses, and the contending interests and bitter religious antipathy existing between the two parties at work, constituting them a *counter guard*, thereby rendering collusion or foul play in the transaction impossible.

The following is the narrative of the facts, as communicated to me by Major —, a retired officer of the Honourable the East India Company's service. This gentleman requested me not to publish his name, lest he might incur the displeasure of the Directors, for having taken such a prominent part in a transaction so much beyond the line of his official duties. However, in order to give the greatest possible authenticity to the facts which he dared venture to do, under the circumstances, after I had written my narrative from the facts which he had communicated to me, he was so kind as to hear the whole read aloud in the presence of several mutual friends, when he pronounced my narrative correct on *every* point, and concluded with the remark, that the case made too deep an impression on his memory ever to be forgotten by him, from the fact of his having been personally so painfully implicated in the transaction.

Whilst staff-officer of a British military station in the Concon, in 1828, this gentleman had heard of some of these strange feats of Fakeers burying themselves *alive* in that neighbourhood, but took no interest in

the reports, believing the whole alleged feats to be mere hoaxes or tricks. However, the following circumstance occurred, which proved to him the reality of certain individuals being veritably possessed of such extraordinary powers.

One day this officer was waited upon by a Brahmin, who held the public office of Chowdrie.—The Chowdrie is a civil functionary who has the superintendence of Courts, and all public transactions or feats within his district; but he is subordinate to the staff-officer in regard to all which occurs within what is called the military limits or cantonments, so that, in all which appertains to the said localities he is, in the first place, obliged to obtain the sanction of the British officer in command.—The Chowdrie told the officer, that the object of his visit was to obtain his sanction for one of his sainted countrymen,—who had come hither for the purpose of performing one of those feats above referred to,—to bury himself for nine days within the military boundary. He moreover added, that an immense number of people had assembled from the neighbouring country to witness the holy man perform the said feat. To this the officer replied, that he did not believe any man was such a fool as to suffer himself to be buried alive for nine days, because in such case he must inevitably perish; and, having said so, he dismissed the Chowdrie abruptly, without complying with his request.

Shortly thereafter, however, the Chowdrie returned, to urge the officer to comply with the request of the Fakeer, assuring him that the holy man was proposing it in good faith, and was most anxious to be permitted to do so within the military limits, as affording better proof that there could be no collusion than if he did so elsewhere; he also added, that he had frequently done so before, and that his sanctity would save him on this as on former occasions. The Chowdrie even went so far as to say, *that his sanctity had given him such power with*

God, that he could remain for any length of time he chose underground with perfect safety. At length the officer replied, "Well, if the man is determined to bury himself, you shall have my sanction for him doing so within the military limits: but remember this, that I shall take care that *no tricks shall be played, but that he shall be buried in good earnest*; and, the more certainly to secure this, his grave shall be surrounded the whole time by a guard of Mussulmans, so that no Hindoo shall approach it during his sepulture." With all this the Chowdrie was perfectly satisfied, seeming firm in his faith that the sanctity of the holy man was quite sufficient to save him during this extraordinary trial.

Hereupon the officer instantly gave instructions to an orderly to send a corporal to see the man fairly buried, and to set a sentry, to be relieved in the usual manner, to keep strict watch over the grave during the whole of the nine days, and to suffer no one even to approach the grave; and, the more certainly to secure this being faithfully accomplished, none but Mussulmans were to be deputed as guards.

In a few hours after these orders had been issued by the said officer, the corporal returned and announced to him, that, after certain proceedings on the part of the saint, and receiving many gifts from the assembled multitude, he laid himself down and passed into a particular condition, after which his followers wrapped his body in a covering called a "kumlee," and then laid him in a grave dug in the ordinary way and of the usual size, from three to four feet deep, and then turned in the earth upon his body. No coffin was used. On this being done, a Mussulman guard was placed, with orders to walk round the grave, and on no account to suffer any one even to approach it.

Every two hours reports were brought to the officer or his orderly that fresh guards had been set to relieve those on duty, and that all remained as when the earth was thrown over the devotee. So

invincible was the hatred of the Mussulman guards against the Hindoos, that they would not suffer any one of them even to approach the grave to get a particle of the sacred earth (a gift inestimable in their opinion) which covered the holy man, whom the Hindoos firmly believed would rise again on the ninth day, as predicted by him.

On the evening of the third day, when other active and important duties had entirely banished from his mind the condition of the buried Fakeer, the officer's attention was drawn to the subject by the person who came to report to him that the sentry had been relieved, and the "dead man all well;" that was to say, remained as at the time he was buried, three days previously. On this announcement being made, the officer, whose faith was less vigorous than that of the Hindoos as to the sanctity of the devotee being able to save him under such circumstances, became alarmed, inasmuch as the feat having taken place with his sanction, within the military limits, and he having set a sentry over his grave, should the man be really dead, as he had no doubt must be the case ere then, he might be brought into trouble and arraigned as accessory to his murder, and lose his commission, with other dire consequences.

The officer, therefore, hurried home, and instantly sent for the Chowdrie, who applied to him for his sanction for the feat to take place within the military boundary, told him his doubts and fears, and urged the instant disinterment of the devotee. The Chowdrie hereupon begged to assure the officer that there was no cause whatever for alarm about the safety of the buried saint, as he had been frequently buried in the same manner, and added, that so great was his sanctity, that he would be perfectly safe, and certain to recover were he to remain in his grave for twelve months or for a hundred years, and he *therefore* urged upon the officer to allow him to remain in his grave for the full term of nine days,

originally stipulated for. Military faith and courage, however, were by no means equal in this instance to that of the Brahmin, and the soldier quailed whilst this enthusiast stood firm, urging the full term of the feat to be exhausted before the exhumation should take place. The officer, however, would not consent to this, but insisted on the instant disinterment of the holy man ; and, moreover, by way of self-defence, in case the worst of his fears should be realised, he ordered the Chowdrie, in case the devotee was found to be really dead, instantly to have his body carried beyond the military territory.

The more certainly to guard against all further mischance, my friend instantly ordered his horse and rode to the spot, that he might be an eye-witness of all the future proceedings. When he arrived at the place, he found the grave surrounded by an immense crowd of Hindoos, all anxiously waiting to witness the result of this exhumation or resurrection of their sainted brother. The Chowdrie having arrived also, orders were instantly given to remove the earth and drag forth the body of the holy man. To the horror of our military friend, forth it came, wrapped in its camel-hair coverlet, on removing which, he found the body cold and stiff as a mummy. When he had satisfied himself of this by personal examination, both by sight and touch, he felt assured that his fate was sealed, that his commission would be lost, and himself implicated in the murder of this religious enthusiast.

There was yet one hope, although to him apparently a forlorn one, that the Fakeer might be restored by the use of those means of restoration which two of the holy man's followers were about to apply, according to instructions which he had previously given to them. They began by rubbing some preparation over his head, eyes, and eye-brows, and also over the palms of the hands and soles of the feet, and were particularly assiduous of their application of it, and friction over the region of the

heart. They had persevered in these attempts for about a quarter of an hour without the slightest apparent impression being made on the subject, and the Christian's hope was now completely extinguished. Not so that of the idolaters of the East. They plied their manipulations with unremitting assiduity, and presently were enabled to open the eyes. Still it was but the glassy look of the eyes of a corpse. By degrees, however, slight motion of the eyes was discernible, which increased until he could slowly move the head; and, after lengthened manipulations and pummelling about his chest, a visible heaving of the chest took place, and still later he was able to articulate a few words, to the unspeakable joy of the Christian master of ceremonies, as well as of the Hindoos and Brahmins assembled on the occasion.

In about an hour the Fakeer had pretty well recovered the use of his faculties, mental as well as physical, and the major left the field quite as much gratified to find he had escaped the loss of his commission, and the risk of being arraigned as accessory to the murder of this devotee, as the latter was to remain and receive the numerous presents and mutual congratulations of his admiring and adoring countrymen.

I think the evidence afforded by these narratives proves, beyond doubt, that the individuals referred to possessed the power they represented themselves to have acquired, and performed the feats indicated *bonâ fide*; and that the true physiological explanation is that which I adverted to at the commencement of this paper; namely, that they were self-hypnotists, and that they were in a state of temporary hybernation, or trance, during which, although the lamp of life was burning slowly, still it *was* burning, otherwise death would have been the inevitable result.

It does not appear that this practice has been long known to exist, and it is rather a curious specula-

tion to determine how it could have originated. The following ideas have occurred to me, and I think a quotation from the "Dabistan" furnishes the key to unlock this mystery :

" It is an established custom amongst the Yogis (Fakeers) that, when malady overpowers them, they bury themselves. They are wont, also, with open eyes, to force their looks towards the middle of their eyebrows, until so looking they perceive the figure of a man ; if this should appear without hands, feet, or any member, for each they have determined that the boundaries of their existence would be within so many years, months, or days. When they see the figure without a head, they know that there certainly remains very little of their life ; on that account, having seen the prognostic, they bury themselves." (Vol. ii. p. 138, 139.)

Thus, then, they die voluntarily, in order that they may escape the ordinary pangs of dissolution ; that is, they reduce themselves to the deep state of self-hypnotism, which I have likened to trance or hybernation in man, in which condition they are committed to their tombs or graves, as their final earthly resting-places. Now, it appears to me no very improbable supposition to allege, that accident had revealed to them the fact, that some of those who were thus buried might be restored to life after exhumation,—the action of the air restoring respiration and circulation, on *an accidental disinterment of the body of some one thus interred* ; and the fact once observed would encourage others to try how much *they* could accomplish in this way, as the newest and most striking achievement which they could perform in token of the divine origin and efficacy of *their religion over that of all others*.

We have the analogue to these feats of the Fakeers, not merely in the hybernating animals which periodically pass into the torpid state, and which, consequently, in them, is looked on as a mere matter of course, and not at all to be wondered at ; but

we have it also occurring spontaneously, occasionally, in the human species, in the disease called catalepsy, or trance. Many cases of trance are upon record, in which the patients remained for considerable periods of time in a state of apparent death, during which preparations were being made for their interment, but who were restored before being buried; whilst there is no doubt of the fact, that, in many others, they had been consigned to their graves whilst yet alive,—for, in some such instances, accidental circumstances have led to the opening of their graves, by which means they were released, and lived for years thereafter. In the latter cases, the feats of these Fakeers have been fully realised in all but the *intention* and *artificial contrivance* of the patients *inducing the condition*; and, in the former, had the subjects been actually interred, and their graves opened in proper time, the like results would have ensued.

Besides the numerous cases of trance already recorded, I have had the history of several others communicated to me, in two of which the patients remained in the horrible condition of hearing various remarks made about their death, and preparations which were making for their interment. All this they heard distinctly, without having the power of giving any indication that they were alive, until some accidental abrupt impression aroused them from their lethargy, and rescued them from their perilous situation. On one of these occasions, what most intensely affected the feelings of the entranced subject, as she afterwards communicated to my informant, was hearing a little sister, who came into the room where she was laid out for dead, exulting in the prospect, in consequence of her death, of getting possession of a necklace of the deceased.

In like manner, in cases of catalepsy, patients have been known to be alive, and still to remain for *a great length of time* in a state of insensibility and *torpor of all the vital functions* to an alarming de-

gree, and to subsist for considerable periods of time without food. This was strikingly illustrated in the case of a patient of my late friend, Dr. John Mitchell of this city, of which he furnished me with the following report. The patient was a poor married woman, who was brought into the Manchester Royal Infirmary, and placed under his care. She remained in that Institution in such an intense state of catalepsy, with her jaws locked, that she neither had *meat* nor *drink* for FOURTEEN DAYS, after which she became so much relieved, that she could be removed to her home, about seven miles in the country.

During the period this patient remained in the cataleptic state, the only visible signs of vitality were, a *slight* degree of animal heat, and appearance of moisture from her breath when a mirror was held close to her face. Every variety of contrivance and torture was resorted to by various parties who saw her, for the purpose of testing the degree of her insensibility, and for determining whether she might not be an impostor, but without eliciting the slightest indication of activity of *any* of the senses.

A most important fact has since been communicated to me by this patient's friends,—a fact which merits the most serious consideration of all who come in contact with such cases, viz., that whilst she had no voluntary power to give indication, either by word or gesture, that she suffered from the said inflictions, nevertheless she *heard and understood all that was said and was proposed to be done, and suffered the most exquisite torture from various tests applied to her !!* A fact so important as this ought to be published in every journal throughout the civilised world; so that in future professional men might be thereby led to exercise greater discretion and mercy in their modes of applying tests to such patients. It may have been excusable to have done so when unaware that they might thereby be inflicting torture upon a helpless and passive human victim; but,

after being made aware of this example to the contrary, they would be altogether inexcusable. (a)

The same discretion ought also to be extended to the modes of testing somnambules. There is no doubt whatever, that in certain stages of that condition, whether occurring spontaneously or induced by artificial contrivance, that some of these patients are perfectly insensible at the time of inflictions the most severe. However, if the means have been sufficiently severe to lacerate, or in any way destroy the tissues, the natural consequences of such inflictions necessarily manifest themselves after the patients are aroused. Thus, in a patient of my own, about whom I was first consulted for an attack of spontaneous somnambulism, besides violent pinchings of her flesh and skin, needles and pins were thrust under her nails, and so anxious was her father to determine whether she might not be imposing on them, as had been suggested to him by some *kind* friend, that he so pinched and bruised the roots of her nails as caused them subsequently to suppurate, and that without her giving the slightest indication of feeling pain at the moment of infliction, or during the sleep. When the poor girl awoke, she wondered what was the matter with her fingers, and what could have made them so painful. This patient

(a) Through the kindness of my excellent and truly worthy friend, the late Rev. Geoffrey Hornby, rector of Bury, I was informed, that this patient was still alive in 1845, and might be seen by me, if I wished to make personal inquiries regarding her state, beyond what he had kindly obtained for me. This I considered it better to avoid, for the following reasons: She had been insane for some time immediately before and after the cataleptic seizure, for which she was sent to the Infirmary, and was still in no very bright state of intellect. I therefore thought it just possible, that, were her mind strongly directed to these past painful occurrences, it might be the means of exciting another paroxysm of active insanity, for which I would be certain to get blamed, and, to guard against such risk, I declined calling on her,—a degree of caution which Mr. Hornby highly approved of.

was very soon cured of her natural somnambulism, simply by inducing a similar condition artificially by the mode which I designate *hypnotising*. On one occasion, when I had hypnotised her, I extracted one of her teeth without the slightest indication of her feeling pain, nor was she aware of it after she was awoke, until her father asked her to feel in her mouth. This patient has now been in the enjoyment of good health for several years, and has never been subject to spontaneous attacks of somnambulism since I first cured her by *hypnotism*.

The phenomena realised by the use of ether and chloroform, in like manner, manifest similar states of anæsthesia more or less profound, according to the quantity exhibited and constitution of the patient, and have given a ready credence to phenomena realised by these means which had been by many pronounced cases of rank imposition when induced by mesmeric or hypnotic methods. The peculiar conditions, also, induced by the use of Bangué, Hachisch, and Dawamesc, in the East, all tend to illustrate certain conditions of the nervous system producible by artificial contrivances. Thus, a slight dose of these produces mental hallucination, with some degree of control over the train of thought—a sort of half-waking dream. As the effects advance, the imagination becomes more and more vivid, and a rapid succession of ideas passes through the mind, assuming all the force of present realities. At this stage, as well expressed by Dr. Carpenter, “The internal tempest becomes more and more violent; the torrent of disconnected ideas increases in power, so as completely to arrest the attention, and the mind is gradually withdrawn altogether from the contemplation of external realities being engrossed by the consciousness of its own internal workings. There is always preserved, however, a much greater amount of self-consciousness than exists in ordinary dreaming,—the condition rather corresponding with that just referred to, in which

the sleeper *knows* that he is dreaming. The succession of ideas has at first less of incoherence than in ordinary dreaming, the ideal events not departing so far from possible realities; and the disorder of the mind is at first manifested in errors of sense, in false convictions, or in the predominance of one or more extravagant ideas. These ideas and convictions are generally not altogether of an imaginary character, but are called up by external impressions, which are erroneously interpreted by the perceptive faculties. The error of perception is remarkably shown in regard to time and space; minutes seem hours, hours are prolonged into years, and at last all idea of time seems obliterated, and past and present are confounded together as in ordinary dreaming; and in like manner streets appear of an interminable length, and the people at the other end seem to be at a vast distance; still there is a certain consciousness of the deceptive nature of these illusions, which, if the dose be moderate, is never entirely lost.

The effect of a full dose, however, is at last to produce the complete withdrawal of the mind from any distinct comprehension of external things; the power of the will over the current of thought is in like manner suspended, and the condition of the mind becomes the same in all essential particulars with that of the ordinary dreamer, differing in this chiefly that the feelings are more strongly expressed, and that they still take their tone almost entirely from external impressions. Thus, says M. Moreau, "It will be entirely dependent on the circumstances in which we are placed, the objects which strike the eyes, the words which fall on our ears, whether the most lively sentiments of gaiety or of sadness shall be produced, or passions of the most opposite nature shall be excited, sometimes with extraordinary violence; for irritation shall pass rapidly into rage, dislike to hatred, and the desire of vengeance and the *calmest* affection to the most transporting *passion*. Fear becomes terror, courage is developed

into rashness which nothing checks, and which seems not to be conscious of danger, and the most unfounded doubt or suspicion becomes a certainty. The mind has a tendency to exaggerate everything. Those who make use of the hachisch of the East profit by all the means which the dissolute manners of the East place at their disposal. It is in the midst of the harem, surrounded by their women, under the charm of music and of lascivious dances, executed by the Almees, that they enjoy the intoxicating Dawamesc; and with the aid of superstition, they find themselves almost transported to the scene of the numberless marvels which the Prophet has collected in his paradise." A still more intense dose, however, reduces the patient to a state of profound narcotism, during which painless operations may be performed, as narrated by Mr. Urquhart in his "Pillars of Hercules," "Travels in Morocco in 1848." He says on this point, "In a very short time he (the patient) becomes so insensible that he seems intoxicated or deprived of life. Then, according as the case may be, the operations are performed, of amputations, &c., and the cause of the malady is removed. Subsequently, the tissues are brought together by sutures, and liniments are employed. After some days the patient is restored to health, without having felt, during the operations, the least pain." Such is our daily experience of the anæsthetic effects of chloroform during surgical operations; and in India the experience of Dr. Esdaile has proved Mesmerism equally potent with the population of the East for like purposes. Indeed it has been proved so in many cases in this country, but I still think that chloroform is the more certain and speedy agent for effecting such purpose in this country; and perfectly safe, provided care is taken to procure pure chloroform, and to administer it with due caution (a) All the above recited phenomena

(a) Mr. Urquhart, in the narrative of his travels in Morocco, in 1848, has furnished many addition

are, in many cases, as genuine and as truly the result of the hypnotic or Mesmeric processes, as when induced by the ingestion into the stomach or through

interesting remarks regarding the hachisch, from which I extract the following. He says:—"It appears as the *potomantes* of the Indus, the *gelotaphyllis* of Bactria, the *achemenes* of the Persians, the *ophismu* of Ethiopia, the *nepenthes* of the Greeks. The apparently contradictory qualities ascribed to these may all be found in the hachisch. Like the ophisnu, it recalls consciousness of the past, and inordinate fears; on account of which it was given as a punishment to those who had committed sacrilege; but above all, it brings, too, that forgetfulness for which Helen administered to Telemachus the nepenthes, and which, no doubt, she had learned in Egypt. Equally does it become a poison which absorbs all others. It will explain the incantations of Circe, and the mysteries of the cave of Trophonius. When taken without suspicion, its effects would appear as the workings within themselves of the divinity. It goes some way to account for the long endurance of a religious imposture, so slightly wove and so incessantly rebelled against. Here was a means at the disposal of the priest, diviner, and thaumaturgist, and beyond all appeals to the mere imagination. The epithets which the Hindoos apply to their *Bangue* might equally serve for the *hachisch*—'assuager of sorrow,' 'increaser of pleasure,' 'cement of friendship,' 'laughter-mover.' *Bangue*, however, when often repeated, is followed by catalepsy, or that insensibility which enables the body to be moulded into any position, like a Dutch jointed-doll, in which the limbs are made in the position in which they are placed; and this state will continue for many hours."

It appears that Mr. Urguhart had much difficulty in arriving at any certain mode of obtaining the preparation, but still remained convinced that there was such a plant as produced it. At length he observes, "At Tangier, I observed a diminutive pipe, about the size of a thimble; I asked what kind of tobacco they were smoking. I was answered *kef* (literally, enjoyment),—it was the hachisch. I found that it was also taken inwardly. Either the leaves are swallowed with water, after being crushed, or it is prepared, and boiled with sugar, or honey, and butter, like horehound, a great variety of seeds and spices entering into the composition, which is thu

the lungs of the medicinal agents referred to; and I believe the great cause of opposition which has been offered to the acceptance of the truth of the genuine

said to vary in its effects, and to be gifted also with medicinal powers. This preparation is the majoun. Its effects were described as those of the laughing-gas, except that, instead of a few minutes, it lasts for many hours. Some cry, some laugh, some fall into drowsy listlessness; some are rendered talkative and funny. They see visions, imagine themselves reduced to poverty, or become emperors and commanders of armies, the natural disposition predominating in the derangement. Men under its influence were pointed out to me in the streets. Everything that one hears of it has the air of fable; and I should have been inclined to treat it as such, but for the evidence of my own senses."

Mr. Urquhart was evidently a thorough investigator, and went to work in the best possible manner for arriving at the truth regarding the preparation and properties of this famous medicine, as the following quotation will prove. He says:—"Finding that I could not understand from description either the mode of preparing it, or the effects, I determined to get those who were accustomed to make it to bring the materials, and prepare it before me, and then to try it myself, and on as many others as I could. I was so engaged for a week after my return to Rabat, for I had successively the three most noted confectioners to try their skill against each other. They have not a regular or uniform process, and the majoun is consequently of very unequal strength and efficacy. Our first attempts were failures. The first proof of the success of our preparation was in the case of a young English clergyman, to whom some of it had been given as a sweetmeat. Some hours passed without any visible effects, when a musician, who had the faculty of strangely distorting his features, came in, dressed as a mummer. 'The Englishman took him for the devil, and a most laughable scene ensued. Next morning, on inquiries after his health, he said he had slept soundly and agreeably, 'as the windows and doors were bolted.' Later in the day, the effect disappeared entirely, and he seemed to recollect the circumstances with a composed pleasure, describing various things that had never happened."

Its effects upon himself are thus narrated:—"The first time I took it was about seven in the

phenomena of hypnotism and Mesmerism, has arisen from the extravagance of the Mesmerists, who have contended for the reality of clairvoyance in some of

morning, and in an hour and a half afterwards I perceived a heaviness of the head, wandering of the mind, and an apprehension that I was going to faint. I thence passed into a state of half-trance, from which I awoke suddenly, and much refreshed. The impression was that of wandering out of myself. I had two beings, and there were two distinct, yet concurrent trains of ideas. Images came floating before me—not the figures of a dream, but those that seem to play before the eye when it is closed, and with those figures were strangely mixed the sounds of a guitar, that was being played in the adjoining room; the sounds seemed to cluster in and pass away with the figures on the retina. The music of the wretched performance was heavenly, and seemed to proceed from a full orchestra, and to be reverberated through long halls of mountains. These figures and sounds were again connected with metaphysical reflections, which also, like the sounds, clustered themselves into trains of thought, which seemed to take form before my eyes, and weave themselves with the colours and sounds. I was following a train of reasoning; new points would occur, and concurrently there was a figure before me, throwing out corresponding shoots like a zinc tree; and, then, as the moving figures re-appeared, or as the sounds caught my ear, the other classes of figures came out distinctly, and danced through each other. The reasonings were long and elaborate; and, though the impression of having gone through them remains, every effort has been in vain to recall them."

Such, then, is the interesting description of Mr. Urquhart's personal experience of the effects of the hachisch.

There is no reasonable ground to doubt that the *Cannabis Sativa*, or *Cannabis Indica*, or Indian hemp, is the chief ingredient in the *Hachisch* or *Bangue*. Like all vegetable preparations, much will depend on the condition of the plant at the time it is preserved, and the mode of its preparation, and other ingredients with which it may be combined, as to the actual results realised from its use; and also not a little on the constitution of the patients, mental as well as physical, to whom it is exhibited.

"The general effects on man, as stated by Dr.

their patients, such as seeing through opaque bodies, and investing them with gifts and graces of omniscience, omnipresence, Mesmeric intuition, and uni-

O'Shaughnessy, from his own observations (at Calcutta), are alleviation of pain (mostly), remarkable increase of appetite, unequivocal aphrodisia, and great mental cheerfulness. Its more violent effects were delirium of a peculiar kind, and a cataleptic state. These effects are so remarkable that I shall quote some cases (says Dr. Pereira, from whose 'Elements of Materia Medica,' pp. 1097, 1098, I make this quotation) by way of illustration.

"At 2 p.m. a grain of the resin of hemp was given to a rheumatic patient. At 4 p.m. he was very talkative, sang, called loudly for an extra supply of food, and declared himself in perfect health. At 6 p.m. he was asleep. At 8 p.m. he was found insensible, but breathing with perfect regularity, his pulse and skin natural, and the pupils freely contractile on the approach of light. Happening by chance to lift up the patient's arm—the professional reader will judge of my astonishment," observes Dr. O'Shaughnessy, "when I found that it remained in the posture in which I placed it. It required but a very brief examination of the limbs to find that the patient had, by the influence of this narcotic, been thrown into that strange and most extraordinary of all nervous conditions, into that state which so few have seen, and the existence of which so many still discredit—the genuine *catalepsy* of the nosologist. We raised him to a sitting posture, and placed his arms and limbs in every imaginable attitude. A waxen figure could not be more pliant or more stationary in each position, no matter how contrary to the natural influence of gravity on the part. To all impressions he was meanwhile almost insensible. He continued in this state till one A.M., when consciousness and voluntary motion quickly returned.

Another patient who had taken the same dose fell asleep, but was roused by the noise in the ward. He seemed vastly amazed at the strange aspect of the statue-like attitudes in which the first patient had been placed. On a sudden he uttered a loud peal of laughter, and exclaimed that four spirits were springing with his bed into the air. In vain we attempted to pacify him; his laughter became momentarily more and more uncontrollable. We now observed that the limbs were rather rigid, and in a few

versal knowledge,—pretensions alike a mockery of the human understanding, as they are opposed to all the known laws of physical science.

In support of the above sentiments I gladly avail myself of the following quotation, from an article in *Frazer's Magazine* for July, 1845 (page 3), by a most acute observer and forcible and clever writer. When writing regarding the feats of the Pythoness, the author says—"Now we take it that the Pythoness, not by the *objective* operation of magnetism *from without*, but by the *subjective* or *personal* influence of *internal* agencies, was enabled intensely to concentrate her *conceptive* faculties (aided by the workings of her *perceptive* powers which had drank in certain transactions of the outer world, and stored them up in her *memory*), from the thousand influences which must ever be at work around her in her waking state, and concentrate them upon a given purpose; whether it were to forecast the probable duration of a man's life or the fall of a kingdom. By throwing herself into the nervous sleep described by

minutes more his arms and legs could be bent, and would remain in any desired position. He was removed to a separate room, where he soon became tranquil, his limbs in less than an hour gained their natural condition, and in two hours he experienced himself well and excessively hungry.'"

Dr. Royle, in his "Illustrations of the Botany of the Himalayan Mountains," page 334, suggests that the hemp may have been the "assuager of grief," or the nepenthes (*νηπενθής*) of which Homer speaks; and, as already said in this note, it is known in India as the "increaser of pleasure," the "exciter of desire," the "cement of friendship," the "laughter mover," &c. &c.

Some imagine that it is through the influence of a large dose of hachisch that the Fakeers accomplish the above-recorded feats of suffering themselves to be reduced to a dormant state for various periods of duration; but I think a state of self-induced trance, or human hybernation, producible at will by artificial contrivance, as I have elsewhere explained, is a far more rational solution of the phenomena.

Mr. Braid (and we mean to show how common this has been practised from the earliest ages down to the present time), she becomes, as it were, isolated from the external world, her whole attention is abstracted from external influences and transactions, and intensely concentrated in the *world within herself*. In this condition the memory is almost supernaturally vivid; she remembers circumstances in the character of the man's life, and remarkable vicissitudes in the history of the kingdom; she reasons logically from the *petitio principii* to the rational conclusion; all the material *facts* in both cases (that of the man and that of the kingdom) pass in review before her; she weighs them with scrupulous nicety, in combination and in their relative bearings, and she arrives at a conclusion which surprises everybody because it is so much more accurate and positive than any which could have been attained by faculties distracted and disturbed by the ever-varying and constantly-succeeding events of the outer world. And this is what the Mesmerists call clairvoyance! At this rate the sublime imagination of Homer himself would be looked upon as the gift of a magician rather than the gift of nature—a piece of witchcraft rather than a concomitant of true genius.”(a)

When, to the following circumstances recounted in these acute observations, we add the aids which the patients draw from the exalted state of smell, hearing, feeling, heat, and cold, whereby they are enabled readily to perceive impressions bearing on

(a) The article from which I have made the above extract, and another in the June number of *Fraser* for 1844, entitled, “Animal Magnetism and Neurhypnotism,” were both published anonymously. They were justly esteemed two of the ablest, most clever, and agreeable articles which had appeared on the subject; and I think it is much to be regretted that they have not, long ere now, been published in a separate form. The real author of these clever articles was Robert S. Sowler, Esq., Barrister-at-law, of Manchester.

the subject in which they are for the time interested, which would be inappreciable to them in their ordinary waking condition, together with the amazing quickness with which they catch suggestions from questions asked, or observations made within the range of their quickened hearing at the proper stage of the sleep, and the acuteness of the reasoning power, quickened memory, and vivid imagination in that state of mental concentration, excitement, and self-confidence, we can easily perceive why they may be enabled intellectually to arrive at striking results occasionally, far beyond the waking capabilities of the same individuals; just as extraordinary feats are accomplished occasionally in dreams (even without many of the above recited aids), of which we have many interesting and undoubted examples recorded. Nor should we overlook the tendency of the human mind in those with a great love of the marvellous, to interpret the slightest approach to a correspondence in their replies into a literal description of their own mental impressions (as many do in interpreting ordinary dreams), and even, unintentionally, to give slight aids to the sleeper, who is very quick to drink in and profitably to digest the slightest suggestion, such as even from the tone of voice of parties around; as is every day done to a considerable extent, and with wonderful success in many cases by those wide-awake clairvoyants called *fortune-tellers*. In the one case as in the other, questions put suggest corresponding answers, and these again suggest fresh questions, and the tone of voice, looks and gestures of parties engaged in this sort of "Canning's game," (at which he undertook to tell, *at twenty guesses*, anything which any one should think of), form wonderful assistance in ultimately arriving at an apparently satisfactory result. That an exaltation of functions or faculties which we all possess in a minor degree when awake, may take place during this sleep in the manner explained.

I readily admit; but they do not amount to anything like the extent and minuteness of detail to warrant such conclusions as the Mesmerists contend for. If true and unaided and vigorous as they allege their powers to be, the answers ought *always* to be *right*, whereas, it is notorious that they are *far oftener wrong* than *right*. The results of carefully tested cases seem to warrant no such conclusion as that of a patient being able veritably to see through decidedly opaque bodies. All the patients possessed of such *alleged* powers, when tested with the rigour which I adopted, or suggested as requisite for guarding against all sources of fallacy which occurred to my mind, have *always* decidedly failed; and I quite concur in opinion with the formerly quoted acute writer in *Frazer*, as expressed by him in the following pithy paragraph—"To insist upon it that a person can see through a thousand brick walls between London and Gravesend, who cannot read plain print covered by only a few sheets of writing paper with-in a few inches of his nose, is an insult to the understanding."(a)

(a) In proof of the wonderful exaltation of the natural faculties which may be realised at a proper stage of the nervous sleep, I beg to call the reader's attention to the following facts, which I have proved in the most satisfactory manner.

I have frequently proved the sense of smell to be so acute in some hypnotic patients, as enabled them readily to detect, in the midst of a large company, any person familiarly known to them; or the owner of any glove, although a stranger to the sleeper, could in like manner be readily detected *by smell*, the patient first smelling at the glove, and then setting off round the room, and unhesitatingly and unerringly presenting the glove to the proper owner, and that without touching him or her; but, if the nostrils were stopped, the clairvoyant faculty instantly ceased, and was recovered the moment the nostrils were unstopped.

In like manner the sense of touch, and the muscu-

In cases of asphyxia from hanging or drowning, if the action of the lungs is entirely suspended whilst the heart's action continues in some degree,

lar sense, have been so remarkably quickened as to enable persons to write with great neatness during the sleep, without the use of their eyes, as when a large broad book was interposed between their eyes and the paper—a far more certain test than any mode of blindfolding with bandages or masks. With all this precaution some patients would write neatly, crossing the t's and dotting the i's, and would even go back a line, strike out a word or letter, and write the correction in the proper place. I had one patient who could go back, and correct with accuracy, the writing on the whole of a page of note-paper; but, if the paper was moved from its relative position on the table, all the corrections would be on the wrong points of the paper, but correct as regarded their position in space in relation with the table, *i.e.*, if the paper had been moved *upwards* the corrections would be so much *under* the line, or if it had been moved *downwards* they would be so much *above* the line; and if to the right, or left, the correction would be so much wrong in the *opposite* direction. Curiously enough, sometimes this patient took his ideas of relative position from the *upper left hand corner of the paper*, and, on *these* occasions, it did not matter for the paper being moved to another part of the table, as that did not disarrange the associations which he had made in his muscular sense. He always, in those instances, felt at the corner of the paper, and then went on inserting all the corrections in their proper places. I once saw him do this even to the double dotting a vowel in a German word at the bottom of the page,—a feat which greatly astonished his German master, who was present at the time. Still, with all this, I have never seen any patient in this condition of sleep write *as well without* the use of the eyes as they were capable of doing when awake with the aid of ordinary vision; but there are some patients who have the use of their eyes during the sleep, that is, *seeing through their partially closed eyelids*, and if not tested in the manner I have indicated, but only by blindfolding them, they are very apt to contrive to displace the bandages or masks, so as to see *from under them*, when they may read or write much better than *when in the wide waking condition*, to the utter astonishment of those who do not comprehend that the

in general, in a very few minutes, the patient is irrecoverably dead. There are well-attested cases on record, however, in which patients have been re-

natural organ of vision, the eye, is the real clairvoyant instrument in such cases.

Again, the quickness of hearing and accuracy of the muscular sense, together with their self-confidence and tendency to sympathy and imitation, enables them to perform feats of phonic imitation which are truly astounding, and of which there can be no mistake. Many patients will thus readily repeat accurately what is spoken in *any* language; and they may also be able to sing correctly and simultaneously both words and music of songs in any language, which they had never heard before—*i.e.* they catch the words as well as music so instantaneously as to accompany the other singer, as if both had been previously equally familiar with both words and music. In this manner a patient of mine who, when awake, knew not the grammar even of her own language, and who had very little knowledge of music, was enabled to follow Madlle. Jenny Lind correctly in songs in different languages, giving both words and music *so correctly and simultaneously with Jenny Lind*, that two parties in the room could not for some time imagine that there were two voices, so perfectly did they accord, both in musical tone and vocal pronunciation of Swiss, German, and Italian songs. She was equally successful in accompanying Madlle. Lind in one of her extemporaneous effusions, which was a long and an extremely difficult, elaborate, chromatic exercise, which the celebrated cantatrice tried by way of taxing the powers of the somnabulist to the utmost. When awake the girl durst not even *attempt* to do anything of the sort; and after all, wonderful as it was, it was *only phonic imitation*, for she did not understand the meaning of a single word of the foreign language which she had uttered so correctly, either when asleep or when awake.

All these phenomena, therefore, wonderful though they be, are only exaggerations or exaltations of functions or faculties which are possessed by all of us in a less degree in the ordinary or waking condition. They do not, however, amount to universal lucidity, or thought-reading, or *community of ideas* with those with whom they are *en rapport*, for, whilst exaltation of her natural faculties of vocal phonic *imitation* enabled the somnabulist girl to imitate correctly

covered after submersion for three quarters of an hour. In these cases, which are not numerous, of course, respiration must have been suspended from the moment of submersion, and it is believed their recovery has been due to a state of syncope or faint (which consists in an entire suspension of the heart's action) having taken place *before* submersion.

In cases of syncope, without submersion, patients may remain for a few seconds, or a few minutes, or for some hours, in a state of apparent death, the body being pale and powerless, and the action of the heart and lungs being apparently entirely suspended. Some few cases are recorded where this has continued for several days; but in such cases, I believe, respiration, and circulation, and vital action have not been totally arrested, but going on feebly and imperceptibly, as in cases of intense hybernation or trance.

The term *hybernation* has been adopted to designate that peculiar state of torpor or profound sleep into which some warm-blooded as well as cold-blooded animals are liable periodically to fall, and to which it seems as natural and regular in its access as common sleep is to all other creatures. They generally pass into this condition in autumn, and continue in it, entirely without food, during the winter months; hence the designation, *hybernation*, or winter sleep.

It seems quite obvious that temperature plays an important part in relation to this condition; for it has been proved that hybernation may be prevented by keeping these creatures in an artificially elevated temperature; and, even when they have passed into

the words and music enunciated by Madlle. Jenny Lind, she understood not one word of the language they uttered, nor could she have imitated Madlle. Jenny Lind's accompaniment on the piano-forte for a single bar—these being arbitrary arrangements *only to be acquired by training and practice.*

the state, that they may be aroused from it, at any time, by *artificial* heat, as well as by the genial warmth of spring.

In warm-blooded animals which hibernate completely, such as the marmot, the power of generating heat is so feeble, that the temperature of their bodies follows pretty nearly that of the surrounding air; so that, at a temperature a little below the freezing point, the thermometer placed within the body falls to 35°, and may remain at this point for some time, without apparent injury to the animal, as it recovers when subjected to a higher temperature. It is thus obvious, that the vital properties of the tissues had been preserved during this state of arrest or depression of their usual vital activity; but when long subjected to a much more intense degree of cold, it has been found that there is not merely a temporary suspension of activity, but that total loss of life is the result.

During hibernation, all the vital functions are proportionably depressed below the natural standard. The pulse is reduced to one-tenth its usual number of beats, and the breathing to about one-thirtieth the number of respirations, whilst it is accomplished with very little perceptible heaving or enlargement of the chest. Now the activity of respiration and quantity of carbonic acid gas eliminated in a given time being the surest test of the general activity with which the vital functions are progressing, it thus becomes obvious that they must all be greatly depressed during this condition; and that, consequently, the disintegration and waste of tissue must be going on at a very slow rate compared with that of the normal active condition. Such is actually found to be the case, and, consequently, these creatures, when in that state, can subsist for a great length of time without food, merely consuming a portion of their own tissues, and that at a very slow rate. They are thus enabled to live without food for

a period far beyond what could possibly happen with them during the active state of their existence.

When in an *intense* state of hybernation, moreover, sensibility is so depressed as seems completely to lock up all the senses; but, when in a less intense degree, there is merely diminished sensibility.

Even in the cold-blooded animals, the activity of the functions and demand for oxygen are less at low than at higher temperatures, as has been beautifully shown by the experiments of Dr. Edwards. Thus, during winter, as I have myself frequently witnessed, frogs can live and move under the ice without the necessity of coming to the surface to breathe, the aerated water surrounding their bodies being sufficient to produce that change on their blood through the skin, requisite to sustain the demands of their feeble life at that low temperature; but, when the season advances, with the increased temperature the activity of the animal ensues, when it becomes indispensable that it shall be permitted to come to the surface to breathe occasionally; and if prevented from doing so after the heat has become considerable, the creature speedily dies. As remarked by Dr. Carpenter, page 369 of his "Manual of Physiology:"—"When the temperature of the reptile is raised, by external heat, to the level of that of the mammal, its need for respiration increases, owing to the augmented waste of its tissues. When, on the other hand, the warm-blooded mammal is reduced, in the state of hybernation, to the level of the cold-blooded reptile, the waste of its tissues diminishes to such an extent, as to require but a very small exertion of the respiratory process to get rid of the carbonic acid, which is one of its chief products." (a)

(a) The power, and propensity, and instinct for migration has been given to certain classes of animals *as a means* of preserving their lives, by inducing *them to roam* to those climates most congenial to

As the tear and wear of the tissues, then, and consequent demand for food to supply this waste, are in exact ratio with the activity of the vital func-

their feelings, whilst affording an abundant supply of appropriate food. When the season becomes cold, and the supply of food scarce, they congregate and fly to warmer climes, from which to return again the following spring. The class of animals which hibernate, being physically incapable of such locomotive powers, must necessarily have perished for lack of food had their demands for it continued equal during winter to what it would have been in the ordinary state of activity of their vital functions. Hibernation, therefore, seems to be one of those wonderful and wise ordinations of Providence for preserving the lives of these creatures during the winter months, by reducing their vital processes to such a low ebb that their lives can be sustained at the minimum expenditure, and which demand can be supplied from the absorption of the fat with which their bodies had become loaded from the abundant supply of food enjoyed by them during the preceding autumn. The whole of that fat, and of the food required to produce it, would not have been adequate to have sustained these creatures during the winter months had they been in a state of ordinary activity; but, by being reduced to this state of torpor and inactivity, the expenditure of tissue is correspondingly small; and thus the means and the end are made beautifully to harmonize with each other. In fact, in animals which do not hibernate, a greatly increased amount of food is required during the intense cold of winter to keep up the temperature of their bodies to an adequate degree beyond what is required for the like purpose in a similar period during the warm season.

But, again, there are other creatures which have not the power of migrating from climes too intensely hot for the normal exercise of their physical functions, and the lives of these animals are preserved through a state of torpor superinduced by the want of sufficient moisture—their bodies being dried up from excessive heat. This is the case with snails, which are said to have been revived by a little water being thrown on them after having remained in a dry and torpid state for fifteen years. The *vibris tritici* has also been restored after perfect torpitude and apparent death for five years and eight months,

tions; and, as we have seen, these are so wonderfully depressed during complete hybernation, as to enable the creatures to subsist *for many months* on their own

by merely soaking it in water. Some small microscopic animals have been apparently killed and revived again a dozen times by drying and then applying moisture to them. This is remarkably verified in the case of the wheel-animalcule. And Spallanzani states, that some animalculi have been recovered by moisture after a torpor of twenty-seven years. According to Humboldt, again, some large animals are thrown into a similar state from want of moisture. Such, he states, to be the case with the alligator and boa-constrictor during the dry season in the plains of Venezuela, and with other animals elsewhere. It thus appears that the Almighty has decreed to manifest His boundless wisdom and power by accomplishing the preservation of his creatures by analogous effects produced by the two extremes (within certain limits) of heat and cold.

The conservative powers of nature, manifested by an arrest or temporary suspension of *vital activity*, superinduced through excessive heat or cold, as above described, is not confined to the animal kingdom. It is also displayed in a remarkable manner in the vegetable kingdom. The almost universal sterility of winter, in cold climates, is familiar to every one who looks abroad over the face of nature, and contrasts it with the rich verdure and bloom of spring and summer; and in hot climates, again, at certain seasons, the face of nature is equally barren and withered from excessive heat. It is well known that the seeds of various plants may remain almost an indefinite period in a state of dormant vitality, superinduced through aridity and seclusion from air, and yet be capable of renewing all their vital actions when sufficient moisture, heat, and air are again supplied to them. Thus, there have been undoubted instances in which the grains of wheat and peas taken from the wrappers of Egyptian mummies have germinated and produced grain different from the present produce of the country, although they must have been so preserved for at least three thousand years. It is therefore impossible for us to set any *limit to the period of duration to which this dormant vitality of seeds and germs might be extended, pro-*

tissues, *entirely without food*, with a pulse at one-tenth its usual number of beats, and respiration reduced to one-thirtieth its usual frequency, both of which being still cognisable to the human senses, we need be the less surprised that the Fakeer, who has acquired the power, by artificial contrivance and *long training as a religious exercise*, of throwing himself into such an intense state of hybernation,

vided they were securely secluded from those circumstances which are well known to expose them to decay, or to call their vital properties into activity.

In like manner the mosses and liverworts do not suffer permanently from being, to all appearance, completely dead, dried up, and withered by heat; but revive and vegetate actively so soon as they are thoroughly moistened. Instances are recorded in which mosses have been restored to active life by a sufficient supply of moisture after they had been preserved and completely dried up for years in a herbarium. "There is a *lycopodium* (club-moss) inhabiting Peru, which, when dried up for want of moisture, folds its leaves and contracts into a ball; and in this state, apparently quite devoid of animation, it is blown hither and thither along the surface by the wind. As soon, however, as it reaches a moist situation, it sends down its roots into the soil, and unfolds to the atmosphere its leaves, which, from a dingy brown speedily change to the bright green of active vegetation. The *anastatica* (rose of Jericho), is the subject of similar transformations; contracting into a ball, when dried up by the burning sun and parching air; being detached by the wind from the spot where its slender roots had fixed it, and rolled over the plains to indefinite distances; and then, when exposed to moisture, unfolding its leaves, and opening its rose-like flower, as if roused from sleep. There is a blue water-lily, abounding in several of the canals at Alexandria, which, at certain seasons, become so dry, that their beds are burnt as hard as bricks by the action of the sun, so as to be fit for use as carriage-roads; yet the plants do not thereby lose their vitality; for when the water is again admitted, they resume their growth with redoubled vigour."—*Dr. Carpenter's Manual of Physiology*, p 91.

or trance, that neither the beating of the pulse nor of the heart, nor the process of respiration can be detected by the nicest scrutiny, should be enabled to subsist without food several days, or even for six weeks, as has been represented to have happened in the case narrated by Sir Claude Martin Wade. Still, there must, of necessity, be a limit to this state of abstinence, even during the state of human hybernation, as the available supply of fat and other tissues would at length become exhausted, when death must inevitably ensue, if not warded off by a suitable supply of food in due time. Whilst we may readily believe it possible, therefore, for the Fakeer to have existed in the state of trance or human hybernation, for the space of six weeks without food, the allegation of the Chowdrie to my friend the major, that the individual to whom he referred would be perfectly safe and certain to recover, were he to be left in the condition for twelve months, or for *a hundred years*, must be looked upon as a mere fiction of his fervid imagination and unbounded religious faith. All hybernating animals, however corpulent they may have been when they passed into the state of hybernation, are found to be quite emaciated when they come out of it; and we have no reason to suppose that it could be otherwise with man, when placed under similar circumstances.

Perhaps there could not be a more interesting proof adduced in point, as regards the relation which subsists between the amount of tear and wear of tissue in a given time, and the degree of vital activity, than was afforded in the experiment with the humble bee, which is recorded to have eliminated more carbonic acid in *one* hour, when in a state of excitement, incident to its recent capture, than it did in *twenty-four* hours subsequently, when in a state of quiescence. This experiment, moreover, proves, that as great a degree of increase in *waste of tissue* in a given time may result from ex-

cessive excitement and muscular effort beyond that of a state of ordinary repose, as this latter exceeds that more profound repose and inactivity realised during complete hybernation.

Moreover, we have remarkable instances of protracted fasting during disease. Thus, Macnish, in his chapter on Protracted Sleep, cites an instance of a patient who remained *eight* days without food or drink; and of another who, on one occasion, "*slept three weeks*," and who, during that period, "took not a particle of either food or drink; nothing could arouse him, even for a moment; yet his sleep seemed to be calm and natural!" In his chapter on Catalepsy, also, he refers to the case of a Polish soldier, who fell into that condition from terror, and who remained for *twenty days* without nourishment.

Whilst this pamphlet was going through the press, I was favoured with the following narrative of a case of trance, which occurred some years ago in a patient of John Woods, Esq., surgeon, Newry, and which he has kindly furnished to me for publication. Mr. Woods writes:—"The case of the young lady, Miss F. C., related to you by my esteemed friend, Mr. Waddell, was one of hysteria, terminating in trance of *four days' duration*. It was not caused by her hearing of the death of her father, or any unpleasant news; her father was dead some years at the time of her illness. She laboured under chlorosis, and, in consequence of this and her complexion being naturally very fair and pale, with white flaxen hair, she had a very corpse-like appearance. Her pulse, which was quick and chlorotic before the trance commenced, became soft and slow. Her breathing, although slow and weak, was always quite perceptible. She would open her eyes when pulled and shook by the arms, and then close them and fall asleep again. It was with great difficulty that she was forced to swallow a few teaspoonsful of drink for three or four days; and any

person looking at her without feeling her pulse, and examining her closely, would say she was dead. Although I, her only medical attendant at the time, and her friends could not but feel very uneasy and anxious about her, yet we always entertained hopes of her recovery, which did not take place suddenly, as we learn that the greater number of cases of trance do, but gradually; leaving her very weak for some time, and, as well as I remember, totally unconscious of anything that occurred during its continuance.'

About twenty years ago my friend Dr. Jarrold, of this city, attended a gentleman forty-four years of age, who fell into a state of trance, in which he continued for a whole week. During this period the Doctor watched him closely, and informs me that the vital processes were reduced to such a low ebb, that he had no expectation of his patient's recovery; the pulse being scarcely perceptible, and the respiration faint, and repeated only about *once in three-quarters of a minute*. After continuing in this state for *a week*, without swallowing a particle of food or drink, he awoke from his trance, and called for *beef-steaks*, when the Doctor had the pleasure of seeing him make a hearty meal. He recovered from this affection, and lived a year thereafter, when he died from a different disease.

The following narrative of another case I give *verbatim* from a letter of the patient's sister, furnished by her to me for publication. The lady writes:—"She and my eldest sister walked to church, scarcely a mile through the fields from their house. Without giving any intimation of feeling unwell, she dropped down in a faint. She was carried out of church to the manse, and though every possible means were tried to restore her to consciousness, *she lay from Sabbath mid-day till Wednesday evening, without giving any sign of life*. It was exactly a fortnight from the day she fainted

before she opened her eyes; but from the fourth day she gave occasionally signs that she knew what was said to her." She adds that two medical men attended this patient throughout her illness, one of whom remained with her on the night when a crisis seemed to be approaching, of which she says:—"Little hopes they had that it would terminate so favourably;" by which it appears that they expected her death at the period when she revived. She took no food during the fortnight she remained in the trance.

In an early number of "The Philosophical Transactions," Dr. Oliver has given an account of one of the greatest sleepers on record. The patient was Samuel Chilton, of Tinsbury, near Bath. He was a labourer, twenty-five years of age, not fat, but muscular, with dark brown hair. In 1694, he fell asleep, and slept for a month, when he awoke, and went about his work as usual. During this period, he partook of food set beside him, and had the usual evacuations, without awaking. In 1696, he again fell asleep, and continued in it for seventeen weeks, during the *last six* of which *he eat nothing*. During the former period, therefore, he was in the sleep waking condition, during which there is present a certain degree of consciousness and voluntary power, resembling those animals which sleep most of the winter, but rouse up sufficiently, occasionally, to enable them to feel hunger, and satisfy the craving for food, which they do by partaking of a portion of what they had stored up for themselves during the preceding autumn. During the latter period, however, like the animals which hibernate completely, he must have survived entirely by consuming a portion of his own tissues. It is much to be regretted that no mention is made as to the extent of emaciation which took place during the latter six weeks, when he eat *nothing*, because in all cases of long protracted fasting, whether the

patient is asleep or awake, we may be quite certain that some collusion is going on by which food is clandestinely obtained by the faster, if there is not some perceptible wasting of the body of the faster. To believe the contrary, would be to admit an impossibility—namely, that we might abstract continually from a given quantity, without diminishing the original amount.

Samuel Chilton again fell asleep in 1697, and slept for six months. His habits, in respect to food, during this period, are not recorded. Many extraordinary and cruel inflictions were perpetrated on his person during these periods, for the purpose of gratifying the curious, and enabling them to determine whether he had any feeling, or whether he might not be an impostor. He gave no indication of feeling pain at the time, nor does he seem to have had any recollection whatever of these inflictions when he awoke.

In the *Medical Gazette* for 1835, page 264, Dr. Sloan narrates the case of John Brown, aged 65, who became imprisoned in a coal-pit in Ayrshire, on the 8th of October, 1835, by the falling in of a portion of the roof. He had gone to work without breakfast, had no food with him, and only a quarter of an ounce of tobacco. On the 31st of the same month he was discovered alive, having thus existed *upwards of twenty-three days without food*. He had also been *entirely without water for the last thirteen days*, having lain down at some distance from some water, and become so weak that he could not move from the spot on which he lay. He was of course emaciated in the greatest degree; but he was conscious when taken out of the pit, and the following day was able to give a detailed and distinct narrative of his sufferings. He died on the fourth day after his release from the coal-pit.

In the same volume of the *Medical Gazette*, Dr. Thornhill, of Darlaston, Staffordshire, gives the

history of eight men and a boy, all of whom were imprisoned in a coal-pit for *eight days, entirely without food*, and with only a very little water. *All of them recovered*, and with the exception of the boy, who subsequently got burnt to death, they were all alive, and in the enjoyment of tolerable health, twenty-two years after the above imprisonment in the coal-pit. Sickness and excessive thirst were the symptoms they complained most of.

These are remarkable proofs of the capabilities of the human body for enduring starvation in the active state of existence, and may tend to make us consider it the less surprising at the length of time the Fakeers can remain without food in their state of self-induced human hybernation. I believe the case of John Brown is the most prolonged instance on record in which a person in such circumstances has subsisted entirely without food.

But again, besides the brown and polar bears, which are well-known to sleep profoundly and without food for many months every winter like other hybernating animals, we have instances in our own country of sheep surviving for several weeks under wreaths of snow, when entirely deprived of food; and the fat pig recorded by Martell as having been overwhelmed by a slip of earth, is a still more remarkable instance in point, as it lived in this situation 160 days without food, and was found to have diminished in weight in that time 120 lbs.; being, as well observed by Dr. Lion Playfair, "an instance quite analogous to the state of hybernation."

I am well aware that there were individuals in this country, as well as elsewhere, who hastily published observations, from limited data, pronouncing the whole of these feats of the Fakeers as mere Hindoo tricks; and, consequently, who will now feel themselves bound, in self-defence, to stand by their former verdicts. I know human nature too well to ex-

pect to extort a confession of conviction to the contrary from such individuals, by any amount of evidence which could possibly be adduced, even if they were permitted to be eye-witnesses of the facts themselves. To all unprejudiced persons, however, possessed of minds capable of weighing the force of evidence,—for “unlimited scepticism is equally the child of imbecility, as implicit credulity,”—I think the original proof which I have been enabled to bring forward in addition to what we formerly possessed on the subject, must be sufficient to prove the *bona fide* nature of some of these feats of the Fakeers, and, consequently, that human hybernation (or a state analogous to that of hybernation in the lower animals) is a physiological fact, and is capable of being induced by artificial contrivance, as well as of occurring spontaneously occasionally in the condition designated *catalepsy* or *trance*.

Three very important inferences may be deduced from what has been said, namely,—1st, That great discretion ought to be used in applying tests for the purpose of determining the extent of torpor of the senses which may exist in any particular case, because it is quite possible that the patient may suffer intensely from such inflictions, without being able, at the time, to give any sensible sign of doing so, from the existence of a complete paralysis of all voluntary power; such as occurred in the case of Dr. Mitchell's patient, and in many others who recovered after having been considered dead, and who declared that they heard and understood all that was said regarding them, and the preparations, which were making for their interment, without having the power to give any indication that they were alive, until some accidental, abrupt impression, aroused them from their lethargy, and rescued them from their perilous situations.

2nd. That all tests which would produce laceration or permanent injury of tissue, should be

avoided, even in that class of patients in whom loss of feeling is complete, or who remember nothing of it afterwards, because, although not felt by the patient at the time of infliction, nor remembered afterwards, whether the state of loss of feeling may be the consequence of spontaneous trance, or anæsthesia induced by hypnotism, mesmerism, chloroform, hachisch, or any other narcotic, such inflictions are certain to manifest their natural baneful influence on the patient, after he is restored to the normal state of sensation,—as was evinced in the case of the natural somnabulist to which I alluded.

3rd. And the third inference is of still greater importance; namely, that in all cases of trance, and indeed in *every case of death*, no patient ought to be interred until there have been indubitable signs of decomposition of the body, because, without this appearance, there is no certain sign of death;—and nothing could be more horrible, either to the survivors, or to the apparently dead, than the idea of themselves or friends being buried alive, not as the Fakeers, with the hope of being released at a stipulated period, but with the certainty that there was no hope of their escape from the grave to which they had been consigned.

The late Miss Beswick, of this city, from the circumstance of having had a brother who made a very narrow escape from being buried alive, became so alarmed that she might run the hazard of being so herself, as induced her to bequeath a large sum to the late Mr. White and his heirs, on the express condition that her body should not be buried, and hence it has been mummified, and subsequently presented to the Manchester Natural History Museum, where it may be seen by the curious.

A very natural inquiry here forces itself upon the mind of every intelligent individual,—namely, what is the best mode of treating cases of catalepsy or trance, so as to ward off the danger of being placed

in such a painful and perilous situation as those adverted to. In reply to this, I beg leave to remark, that it is well known that most of these cases have occurred in females; that they are closely allied to hysteria; and that they have an intimate relation to irregularities in the female functions. Now, the catamenial function, and various morbid phenomena connected therewith, are so remarkably under the control of the hypnotic mode of treatment, that there can be no doubt whatever of its superiority over all other methods in the treatment of such affections. If any other functional derangement exists which could be benefited specially by any other established mode of treatment,—by the exhibition of medicines,—I would by no means object to their exhibition; but, I maintain that the re-establishment of the catamenia by hypnotism is more certainly realised by this method alone than by any other; and, in proof of this, I beg leave to subjoin the following case, in addition to others which have long ago occurred to me, and have already been published.

In July, 1849, I was called to attend Mrs.——, thirty years of age, married, and the mother of three children. She had suffered from attacks of epilepsy for four years, for which she had been under the care of several medical men. The attacks became a little less frequent for some time, but again increased in frequency and severity, until, at the period when I was consulted, notwithstanding she was under the constant care of a physician, and was taking medicine prescribed by him repeatedly every day, still she was getting worse, so that she had as many as twenty-eight fits daily, besides what occurred during the night, when her attendants were asleep. The day before I first operated on her, she had thirteen violent fits in the space of eight hours; and, when I first saw her, she was jaw-locked, *as a sequel to one of these epileptic attacks.* Her

friends told me, that whenever this state of locked-jaw occurred, they were never able to open her mouth for many hours, however much force they might apply to effect it. They were, therefore, not not a little surprised to observe that, by one of my usual processes for reducing the cataleptic state of muscles during hypnotism or mesmerism, I was enabled, in a *few seconds*, to unlock her jaws and open her mouth, without the slightest difficulty or force. This patient was speedily thrown into the hypnotic condition by my usual method, and the result of my first operation, which was not more than of a quarter of an hour's duration, was this,—that the patient had only *four* fits in eight hours. instead of the thirteen which she had during the corresponding period on the day previous.

This patient was operated on by me twice each day subsequently, and on the fourth day the catamenia, which had been absent for several months, re-appeared, and, in the course of a week, the fits were almost entirely arrested. Indeed, from that period, she had only three fits, and these were brought on by causes of considerable mental excitement. The catamenia recurred regularly for the next six months, and the results realised from the use of hypnotism, when they again became suspended, beautifully and conclusively illustrate the value of this mode of treatment in such affections.

At six successive periods I had occasion to resort to hypnotism, for this purpose, and in *every* instance with *entire success*, by a *single operation of from ten to eleven minutes each*. Moreover, I ascertained that this important result could be effected without either touch or pass, but by mental concentration and direction, and management of the circulation alone. On two or three other occasions, when I hypnotized this patient for neuralgic or rheumatic pain in a leg or arm, through the mode

of managing and directing the influence, the pains were immediately removed, without exciting any visible manifestation on *any* special organ or function.

Hypnotism is, therefore, not only a most efficient, but also a perfectly safe mode of treating various affections, by those who understand its practical application, and how to control and direct its power: and here I shall adduce a few examples in point.

The first day I visited the epileptic patient, whose case I have already narrated, her mother, who was fifty-four years of age, and the mother of a numerous family, told me she had been grievously afflicted with headaches, so that she had not known what it was to have been entirely free from headache for the previous *fourteen years*. She stated, moreover, that she suffered from pain and smarting of her eyes, and that her sight had become so affected, that she could not then see to read a sign across the street. I recommended her to try the effect of hypnotism, which I believed calculated to afford her relief for *both* affections. To this she readily consented, and, to her great delight and surprise, on being aroused from the first hypnotic sleep, she found herself *quite free from headache, for the first time for fourteen years*. Next day I found she had a slight return of headache, and, for a few days thereafter, less and less of it daily, during which period I hypnotized her daily, and, in the course of one week, the headaches were entirely gone, and never returned since, unless for a short time occasionally, as will occur to any one; and the pain and smarting which she formerly felt in her eyes, also entirely disappeared, and her sight became greatly improved, and has continued so ever since.

In August, 1849, I called on the above patient with my friend Professor Shaw, who was anxious to witness the effects of hypnotism, and she hap-

pened to live near his residence, and was known to me as a trust-worthy person. She told me that she had been severely afflicted, during the previous night, with diarrhœa, and that she had had six calls within the last two hours. I told her that I could soon relieve her by putting her into the hypnotic state. Notwithstanding the great benefit which had been realised from it, both in her own case and that of her daughter, she seemed quite sceptical as to the power of hypnotism affording any relief to her present affection. I thought otherwise, however, and consequently she submitted to the operation, and on being aroused from the sleep, all the griping and feeling of sickness at stomach were gone, and she had no return of the complaint subsequently.

Three days after the above occurrence I was sent for, in consequence of my former patient, the epileptic daughter, having been seized in the same manner as her mother had been three days previously, and they were anxious to know whether I could afford as speedy and effectual relief to her, by the same means, as I had done to the mother. I operated on her accordingly, in the manner calculated to produce this effect, and with equal success as in the case of the mother, all the unpleasant symptoms being gone when I aroused her, and there was no return of them subsequently.

In July, 1849, when visiting a child, the mother of whom was forty years of age, and had had nine healthy children, the mother stated that she herself had been tormented for four days with the most disgusting smell. The impression had arisen from her going into the house of a relative whose body had been kept till it was in a state of advanced decomposition. From the moment the impression was made on her olfactory nerves on entering the house of the deceased, she had never been able to get rid of it, whether within doors, or in the open air, notwithstanding she had resorted to the use of all sorts of

fragrant scents, to sal volatile, to snuff, and even to the fumes of tobacco and burning lucifer-matches, and every other contrivance she could think of. Still all had proved in vain, the disgusting odour being still as vivid as the first moment of its impression. The patient, therefore, was glad to try any method I might suggest, and consequently I threw her into the hypnotic state, during which I kept her mind constantly dwelling on the idea of fragrant odours, by exciting the idea in the mind through auricular and muscular suggestion, according to the principles laid down in my writings on hypnotism. I took care to awake her with the mind actively engaged with these agreeable ideas, and the result was, that the moment she was aroused from the sleep, she exclaimed with delight, that she *now* enjoyed a smell *as delightful* as the former had been disgusting. From that moment this patient was never again annoyed with the disgusting odour, not even when, on several occasions, she attempted, by way of experiment, to recall it.

Can there be any ground to doubt the value and power of hypnotism in such a case as this?

On the 28th of March, 1843, I was requested by a philanthropic gentleman (the individual here referred to was the late Hon. and Rev. William Herbert, Dean of Manchester,) to extend my charitable sympathy to a poor woman of the name of Barber, and by the power of hypnotism to relieve her of a severe rheumatic affection, from which she had been suffering for several months. She was forty-four years of age, and a most pitiable object, suffering severely from pulmonary affection, as well as from rheumatism. With the latter affection she became afflicted about the beginning of winter; about the end of December, 1842, had been entirely confined to her bed for five weeks, after which she was able to get up; but the flexors of the legs and toes were so contracted that she could not extend

them, and it was with great pain, as well as with difficulty, that she crawled about her apartment. Her hands, wrists, and fingers, were also much affected ; so that she was very helpless. Her pain was not only severe, but unremitting either by day or by night. After being hypnotized the first time, during which I endeavoured to regulate the irregular condition of the muscles, she was enabled to straighten her legs and toes, and move her wrist and fingers, could walk with great freedom, and expressed herself almost entirely free from pain both of legs and arms before I left her house. After *five* operations, as is well known to many, she was so well as to be able either to walk or run across her room, and even to step on a chair, with either foot first, without assistance. I operated on her thirteen times altogether, and she remained, to my certain knowledge, free from rheumatism up to the end of December, 1843, and I have reason to believe had no other attack of it subsequently, as I heard nothing farther of her, and she had my assurance, as well as that of the late Dean, that I was willing to give her any further assistance of the sort she might require at any time, as an act of charity.

It is commonly said that seeing is believing, but feeling is the very truth. I shall, therefore, give the result of my experience of hypnotism in my own person. In the middle of September, 1844, I suffered from a most severe attack of rheumatism, implicating the left side of the neck and chest, and the left arm. At first the pain was moderately severe, and I took some medicine to remove it ; but, instead of this, it became more and more violent, and had tormented me for three days, and was so excruciating, that it entirely deprived me of sleep for *three nights successively*, and on the last of the three nights I could not remain in any one posture for five minutes, from the severity of the pain. On

the forenoon of the next day, whilst visiting my patients, every jolt of the carriage I could only compare to several sharp instruments being thrust through my shoulder, neck, and chest. A full inspiration was attended with stabbing pain, such as is experienced in pleurisy. When I returned home for dinner I could neither turn my head, lift my arm, nor draw a breath, without suffering extreme pain. In this condition I resolved to try the effects of hypnotism. I requested two friends, who were present, and who both understood the system, to watch the effects, and arouse me when I had passed sufficiently into the condition; and, with their assurance that they would give strict attention to their charge, I sat down and hypnotised myself, extending the extremities. At the expiration of *nine minutes* they aroused me, and, to my agreeable surprise, *I was quite free from pain, being able to move in any way with perfect ease.* I say *agreeably* surprised, on this account: I had seen like results with many patients; but it is one thing to *hear of pain*, and another to *feel it*. My suffering was so exquisite that I could not imagine any one else ever suffered so intensely as myself on that occasion; and, therefore, I merely expected a *mitigation*, so that I was truly agreeably surprised to find myself *quite free from pain*. I continued quite easy all the afternoon, slept comfortably all night, and the following morning felt a little *stiffness*, but *no pain*. A week thereafter I had a slight return, which I removed *by hypnotising myself once more*; and I have remained quite free from rheumatism ever since, now nearly six years. Was there the slightest room to doubt the value and efficacy of hypnotism in this case?

I shall only give one more case here in confirmation of the value of hypnotism as a therapeutic agent in certain forms of disease, and a more in-

teresting example in point could not well be met with.

In the beginning of spring, 1849, a young lady, about fourteen years of age, was brought to me from Armagh, in Ireland, for a case of permanent tonic spasm of the left hand and wrist, of four months' standing. She had been attended by two eminent professional gentlemen from her first seizure, and from the high character they bear I doubt not but they exhausted the whole resources of our art in her behalf. Still with all this the case remained as bad as ever, or rather getting worse by lapse of time. The spasm never relaxed either by night or day, asleep or awake; and when I first examined her, no force I was capable of exerting made any impression on it, so firmly was the hand locked. I hypnotized her, and on the third day, whilst in the sleep, I was enabled to unlock her hand, and in a few days she could use it in tying her bonnet, and in feeding herself; and very soon was quite well, and has continued free from any attack of the sort ever since. She neither had internal medicine nor external application from me, to aid in this happy result; and therefore there is no room to doubt the value and efficacy of hypnotism in treating this interesting case, as the change was effected so speedily as to place hypnotism and the cure in the obvious relation of cause and effect.

Nothing can be more preposterous and presumptuous than continually to hear professional men who have had no *practical* experience of this mode of treating disease, presuming to dogmatise, condemning it on mere *theoretical* grounds, and setting up their *theoretical* and *preconceived* notions as of force to countervail the results of the *actual practical* experience of those who have studied the subject for years with the greatest care and attention. In all other matters practical experience, as well as scien-

tific knowledge, is deemed requisite to constitute an individual an authority upon a given subject, and why not also upon this? Such sceptics allege that inasmuch as some of the phenomena realised by hypnotism or mesmerism have a strong *similarity* to certain forms of hysteria, that it must be a great delusion to suppose that we can cure a disease by inducing a state *so like it*. Have I not already stated the fact that I cured a case of natural somnambulism very speedily by inducing an *analogous* state by the process which I call hypnotising? I was equally successful in curing sleep-walking in a near relative of my own, by hypnotism. He was accustomed to rise in his sleep, and talk, and walk in this state, so as to cause considerable anxiety for his safety, but after being hypnotised a few times this tendency vanished, and has not recurred for many years past.

Here, then, we have spontaneous somnambulism by day, and sleep-walking and talking by night, *both* cured by inducing an *analogous* condition by artificial contrivance. In many cases, inducing an *analogous*, whilst it is *not* an *identical* condition, seems to be the most speedy and certain mode of curing various affections,—as for example, a solution of nitrate of silver applied to the eyes in cases of chronic ophthalmia. Some cases again are more benefited by an opposite mode of treatment; and I hold it to be the duty of every medical man to adopt whatever mode of treatment experience has proved to be most speedy and certain in curing his patient, provided it is also a perfectly safe method. At all events, I am warranted to speak most confidently, as the result of considerable extent of practice in *both* modes of treatment, and that without the slightest desire of holding up hypnotism as a panacea or universal remedy, that, when judiciously applied, it is capable of being made one of the most efficient modes of

treating various forms of hysteria, spinal irritation, spinal distortion,(a) epilepsy, and many other

(a) *Apropos* of spinal distortion. I should do great injustice to a most talented and meritorious member of my profession, were I not to record the following facts: About eighteen months ago, a metropolitan surgeon, of high mental attainments, called on me with a letter of introduction from a mutual friend. A principal object of inquiry with him was to obtain a knowledge of my views of hypnotism and mesmerism. I consequently explained and exhibited to him my views of hypnotism, and especially its applicability to the successful treatment of various forms of disease. The better to illustrate its influence to this gentleman, I also operated several times on himself. This same individual was lately in attendance on a family in which there were two daughters severely afflicted with spinal curvature. The elder daughter was sixteen years of age, and had been under constant treatment for this affection for nearly six years. Under the care of one gentleman, celebrated for his treatment of spinal affections, this young lady had been made to recline night and day for *sixteen months*; during which period she was subjected to the counter extension of pullies and weights attached to her body, extending from under the chin, and both arms, and opposed to those were others attached to both ancles. This patient was also made to pull a rope and lift a weight appended to it, with one arm, *three hundred times each day*, for four years, besides other gymnastic exercises; but still she got worse, notwithstanding this prolonged use of the *procrustean bed*, and other appliances enumerated to boot. The advice of professional gentlemen in the metropolis, eminent for their reputed skill in the treatment of such affections, was had recourse to; amongst others, that of *the most* eminent for his reputed skill in joint and spine affections. By the advice thus obtained, various complicated and expensive mechanical apparatus were obtained and persevered with for upwards of *four years more*; but the result was that, instead of improvement, there was a decided and rapid progression of the complaint for the worse. The younger sister, now fourteen years of age, had also become affected, and had been subjected to constant treatment from the first moment she was discovered to be so. She had persisted in treatment for *three*

nervous disorders, including neuralgic and rheumatic pains, which are well known to be most intractable according to the ordinary medical modes of treating them.

years, but without the slightest improvement; on the contrary, she had rapidly lapsed into a state of distressing and complicated distortion of both sides of the chest. At this stage of the complaint the parents became painfully convinced of the utter hopelessness of benefit from further perseverance in a similar course of treatment, as it had been commenced when the deformity was so slight as to be quite invisible when the patients were dressed; whereas, they had at length attained to a most distressing extent of deformity. As remarked in the mother's first letter to me, notwithstanding all the means used, "and reclining a great deal, the deformity has continued slowly but most surely to gain ground, till it is now very extensive. The instrument (she adds) holds the figure wonderfully well, but when that is removed there is evidently less and less strength in the weaker muscles to do the duty for themselves."

At this stage of the complaint the surgeon above referred to lent the mother my work on hypnotism, and expressed himself convinced that the hypnotic mode of treatment was likely to be more successful than any other with her daughters. This gentleman, had he been selfishly inclined, might have retained the two patients under his own care, as he had the entire confidence of the family, and might have urged that I had personally communicated to him a theoretical knowledge of my hypnotic mode of treatment; but, with a rare degree of liberality and kind humane feeling, he expressed himself fully convinced that hypnotism was likely to do them more good than any other mode of treatment, and alleged, moreover, that I must more thoroughly understand its *practical* application than those who had only studied my method theoretically. The consequence was, that the two young ladies were brought to Manchester, and put under my personal superintendence. I think it only an act of justice to the individual who acted thus nobly and generously and humanely to his patients, to announce his name, viz., J. J. G. Wilkinson, Esq., surgeon, Hampstead, London.

Whilst this pamphlet was passing through the press, *the mother of these ladies*, a most acute and talented

In the little *brochure* which I published in 1846, on "The Power of the Mind over the Body," abundance of evidence was adduced to prove that, even in the wide-waking condition, a constant fixed atten-

person, arrived in Manchester, to place her two daughters under my care. My first hypnotic operation with them was on the 10th instant, when both patients were rendered cataleptic, but on being aroused they had a perfect recollection of *all* which had occurred in the room during their sleep. Next morning they were again operated on, when they were not only rendered cataleptic, but also talked, and wrote, and exhibited mental emotions through muscular excitation, of all which they remembered nothing when awake, but on being sent to sleep again they remembered *every particular*,—thus manifesting double-consciousness. In the evening of that day I had the steel apparatus removed before operating on my patients, because I then intended to turn to account, in rectifying the spinal distortion, the peculiar susceptibility which had been induced in my patients by the two previous operations.

The instant the apparatus was removed, the result of the erroneous mode of treatment which they had been pursuing manifested itself; for there was no muscular power to support the body in the proper position; and the falling down and distortion of *both* patients was most painful to witness, the more so as they were two most intelligent and sensitive girls. The falling in or contraction of the left side, and projection of the right shoulder, in the elder sister, were most painful to look upon; and the *double* curvature of the younger sister, although of shorter duration, was still more appalling to witness. Having hypnotized these patients, and called a cataleptiform degree of energy into the morbidly-weakened muscles, and thus brought the body into a more favourable position, it is impossible for me to describe the astonishment of the mother and the ladies' maid of the patients, when they witnessed the power which the patients had so speedily acquired of supporting themselves, during the sleep, in this improved position,—far superior even to the position in which they were ordinarily supported by the mechanical apparatus. Their surprise was still greater, however, when they found that after the patients were aroused they still retained an in-

tion of the mind concentrated on any part of the body, or on any special organ or function, would change the physical action of the part so regarded; and the more so if the mind was fully persuaded of

creased degree of power, by which they were enabled to support themselves so well by voluntary effort, which they had not had the power of doing for a long period previously. The mother exclaimed, that much as she expected from what she had heard, both from Mr. Wilkinson and myself, still what she now witnessed far exceeded her most sanguine expectations; and added, that she only wished that *all medical men*, and all others who had relatives suffering from such affliction, could only witness what she had then seen, as it was utterly impossible for any one to resist the force of such ocular demonstration as she had then had presented to her, regarding the value and power of hypnotism in the treatment of such affections.

Twice each day these operations were repeated, and with such marked improvement, that without the slightest inconvenience, in less than a week, they could walk about from half an hour to three-quarters after the operations, without the apparatus or any support from stays, with perfect ease, supporting themselves by muscular effort alone, and in a better position than the instruments afforded; whereas before my operations, they durst not remain a single minute in the erect posture without their mechanical apparatus. The gratification of the patients and their mother is unbounded, from my success with them having so far exceeded their most sanguine expectations in both cases. In short, hypnotism is by far the *most rational* as well as *most successful* mode of treating such complaints, because it infuses increased vigour into the weak muscles, which, increased by each repetition of the process, to a considerable extent persists *after* the patient is awake. Moreover, by cataleptiformly fixing certain muscles, and preventing the expansion of corresponding regions of the chest, the formerly collapsed or depressed portions of the chest and lungs are brought into play, and thereby expanded; whereas the mechanical supports now applied, unless when there is positive disease of the bones of the spine, are *worse than useless*, for this reason, because they waste by compression, or weaken by traction,

the certainty of such result being realised. In a certain stage of the hypnotic sleep there is a greater degree of mental concentration, and a greater vividness of the imagination in those who pass into the

muscles which naturally ought to give due support and form to the human figure; so that, as well expressed by the mother of these patients, as quoted above, when the instruments are "removed, there is evidently *less and less strength in the weaker muscles to do the duty for themselves.*" In all cases of spinal distortion which are capable of cure or amelioration,—and almost all cases are so at an early stage,—there is no reason to doubt that hypnotism, when properly directed, is quite capable of arresting, or of entirely curing, cases of spinal curvature; and it is, moreover, a far more agreeable, safe, and less expensive method than that which requires the aid of so much mechanical apparatus, and so much confinement of the patients to the recumbent posture.

After I had attended these patients for a week, the mother called my attention to the contracted state of her elder daughter's arms, both of which she had been unable to extend fully for upwards of four years. The right fore-arm I ascertained could not be extended beyond an angle of about 55° with the humerus; the left was considerably less contracted. The malposition had been induced by the position in which her arms had been held so long during her first sixteen months recumbent posture. I immediately acted on the right arm so as to ensure the cataplectic state of the extensor muscles, and on arousing the patient a few minutes thereafter, it was ascertained that she could then extend the arm completely by her own voluntary effort; and by then operating on the left arm, an equally satisfactory result ensued. All this may appear very marvellous to those who are unacquainted with the extraordinary power acquired by us over the muscular system during the hypnotic state. Let them judge of this power by the following fact, detailed by Dr. Carpenter in his article on sleep in the "Cyclopædia of Anatomy and Physiology." He there says: "We have seen one of Mr. Braid's hypnotized subjects, a man remarkable for the poverty of his muscular development, lift a twenty-eight pound weight upon his little finger alone, and even swing it round his head." I may add to the above important fact, that

second—conscious state of the sleep, and a greater general mobility of the system accordingly, and thus we obtain the effects in a proportionably more speedy, intense, and certain degree than in the waking condition; and thus, by inducing a *new* and *altered* action, we get rid of the previously existing *morbid* action.

Remarkable and important, therefore, as the phenomena which I contend for as producible by hypnotism are, it must at once be obvious to every candid and intelligent member of the profession, that they violate no established law and recognised principle in physiological and psychological science.

ARLINGTON HOUSE,
Oxford-street, Manchester,
July, 1850.

the said individual had not, for six years, been able to lift with impunity more than fourteen pounds when in the waking condition; and yet, on another occasion, I saw him in the sleep lift as high as his knee, on the last joint of his fore-finger, a fifty-six pound weight. Such increased muscular power, then, being infused into morbidly weak muscles, an increased power persists in them after they come out of the sleep; and this accumulating by each repetition of the process, readily accounts for the satisfactory results realized, upon the principle of an improved system of training. Nor should I omit to add, that morbidly-contracted muscles can be as speedily reduced to a natural condition by appropriate management during the hypnotic state. Vide pages 59, 65 and 71.

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